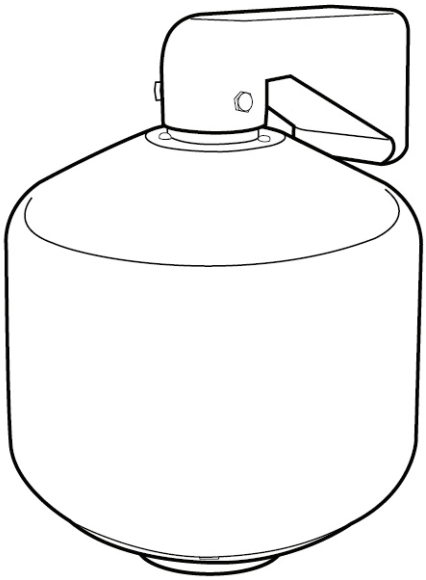
ALC-9551/9552

Outdoor High-Speed Dome Network Camera



User Manual

Software Version 1.25

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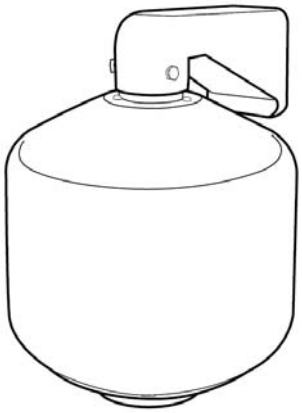
Package Contents

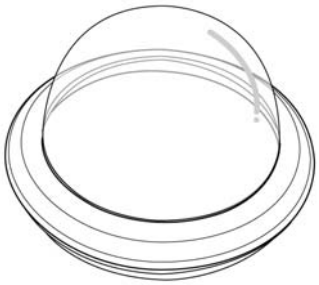
Make sure you have received the following items. If any item is missing, please contact your dealer.

Camera Unit Pack

1. PTZ Dome Camera

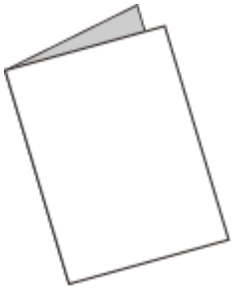


2. Dome Cover

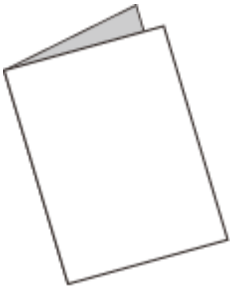


Accessory Pack

3. Quick Guide



4. Hardware Installation Guide



5. CD ROM (Manual/Software)

6. Glove

System Requirements

ALC-9551/9552	
Network Environment	
LAN	10/100M Ethernet
Monitoring system resource requirements	
Operating system	Windows 2000 Professional SP4，XP Home SP2
Browser	Internet Explorer 6.x or later versions
System hardware	CPU: Pentium 4, 2.4GHz or better RAM: 512MB (1GB recommended) VGA resolution: 1024x768 or higher

Introduction

This product is a speed dome camera that can connect to Ethernet, LAN, and any broadband networks. Unlike traditional CCTV cameras, a CPU and a webpage server are built in the speed dome camera to provide a professional remote monitoring function for the user. This camera provides a 360° quick rotation monitoring and an intelligent image detection system that automatically locks on target and enlarges the image when an abnormal object is detected. This product is a professional, cutting edge monitoring equipment.

Features and advantages

The speed dome camera can operate independently without the need for any other hardware or software. After the camera is connected to the network, the remote monitoring can be achieved via the IE browser (version 6.0 or above) of a computer to provide the best security.

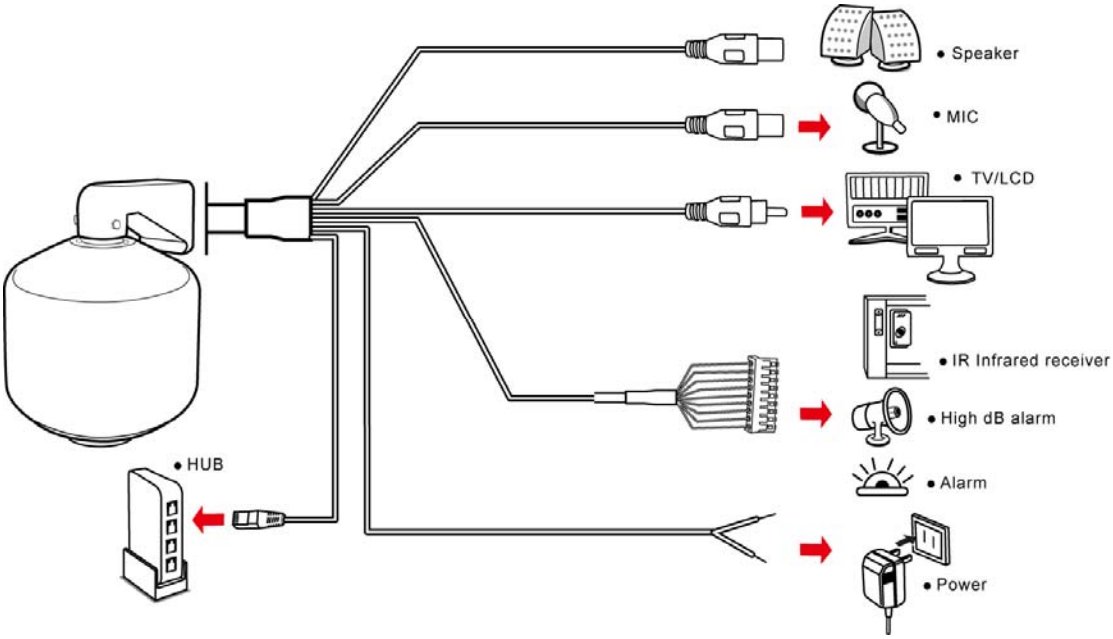
The camera has the following features:

- The 1/4” Sony ExView HAD CCD image sensor provides vivid image quality.
- The 18x, 26x or 36x optical zooming camera lens allows a clearer view from a distance.
- MPEG4/MJPEG dual image compression modes and the dual encoding capability meet different requirements of the user.
- Rotation speed reaches up to 400° per second allowing for quick positioning.
- Automatic surveillance camera can rotate 360° horizontally and 0° - 90° vertically with 64 preset positions.
- Day & Night Mode with Auto-IR Cut Filter.
- Wide Dynamic Range (WDR) function enables the capture and display of both bright areas and dark areas in the same frame (for ALC-9552 Model Only).
- IP-66 Weather-Resistant Housing for outdoor environment usage.
- The intelligent dynamic image detection function can automatically monitor abnormal situations and make instant response according to the setting.
- The built-in webpage server allows an easy access via networks.
- Dynamic IP and DNS are supported. The camera can operate in a setting without any static IP.
- User permission can be set based on different levels to ensure the security of the camera and protection of the property.
- The simple and clear design is suitable for airports, train stations, office buildings, large gymnasiums, warehouses, factories, shopping malls and schools.

System Introduction

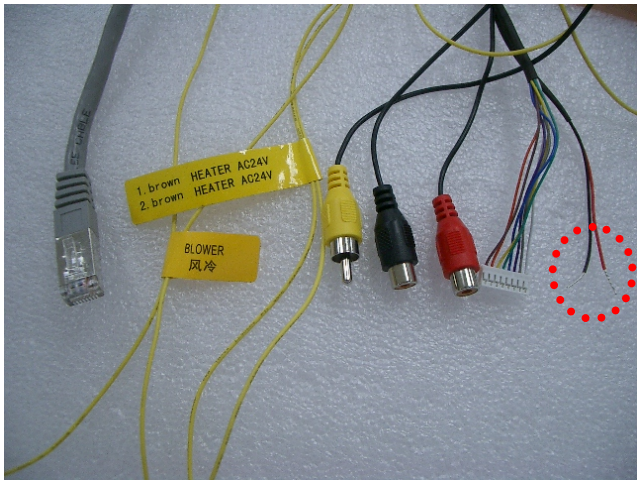
1. AC/DC power inlet: This product supports both alternate current (AC24V/1A) and direct current (DC12V/2A). Please connect the product to a power supply. The power input of this product is non-polarized. The product can automatically determine the type of the incoming current.
2. Ethernet connector: An RJ-45 connector is provided for connection to the 10Base-T Ethernet cable or 100 Base-T High Speed Ethernet cable. This port can automatically detect or coordinate the transmission rate of the network.
3. Use a video/audio output cable for external video/audio transmission if required.

Wiring of the product



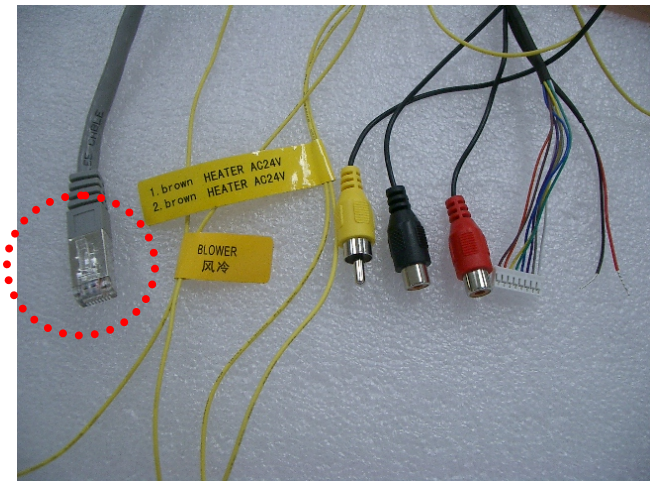
AC/DC power inlet

Please connect the product to a power supply from the AC/DC Power Inlet. The power inlet of this product is non-polarized. The product can automatically determine the type of the incoming current.



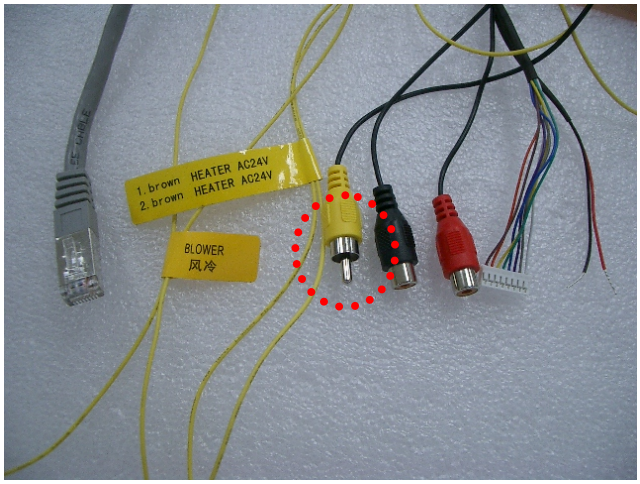
LAN socket

Please connect the product to your network from the LAN socket.



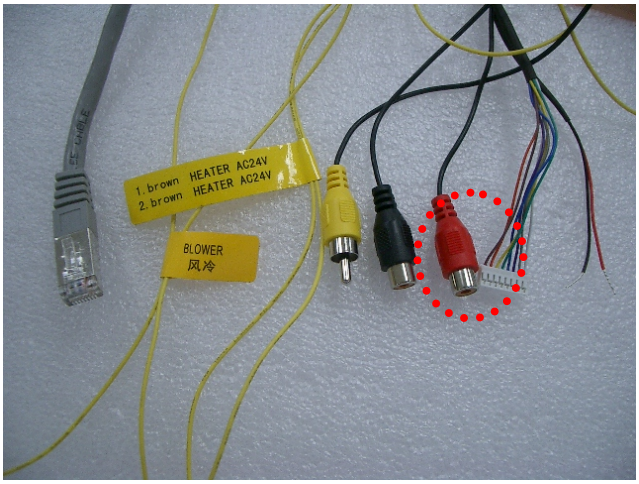
Video out

Please connect the product to the display using the video out cable.



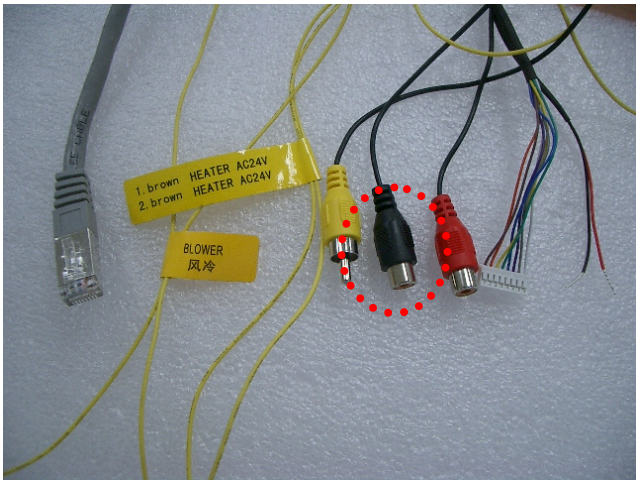
Audio in

Please connect the product to the microphone using the audio in cable.



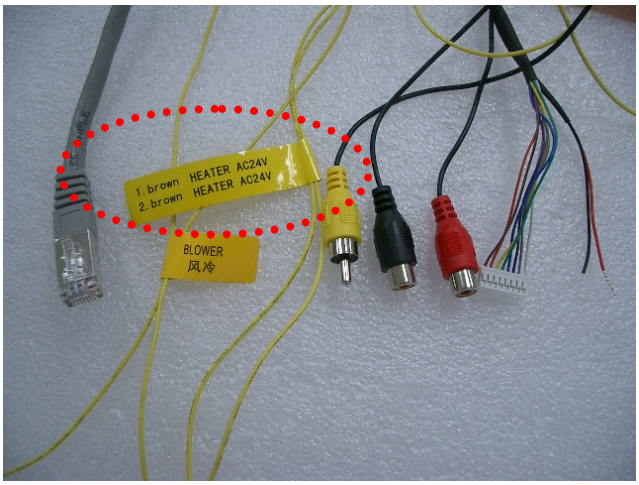
Audio out

Please connect the product to the speaker using the audio out cable.

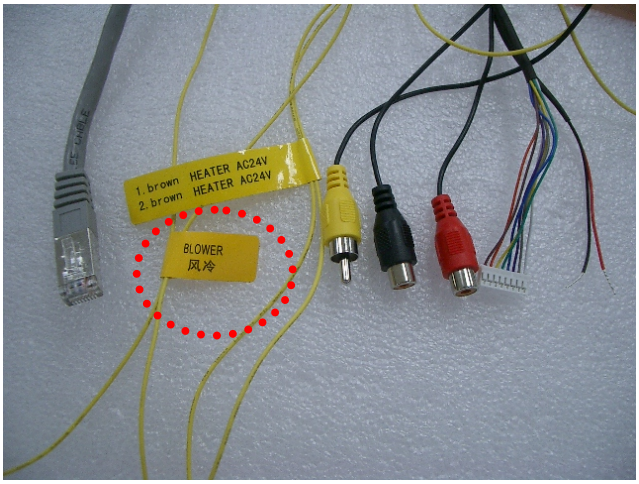


Power inlet for anti-fog air heater

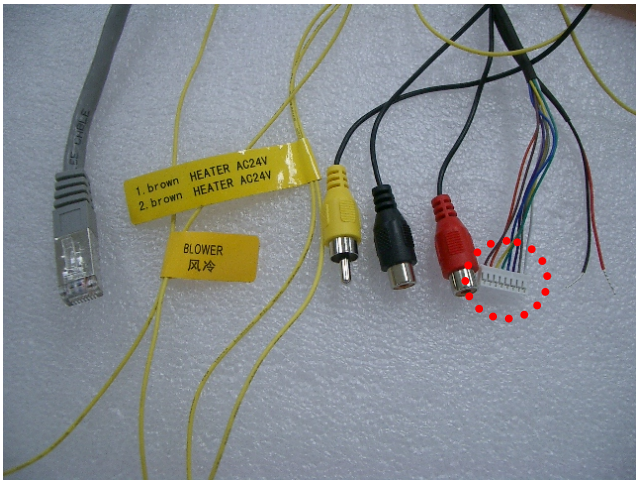
The product equipped with automatic temperature detection and air heater to prevent fogging. Please connect to AC 24V power outlet.



Power inlet for cooler fan
The product will automatic activate the cooler fan when the inner temperature is too high. Please connect to AC 24 power outlet.



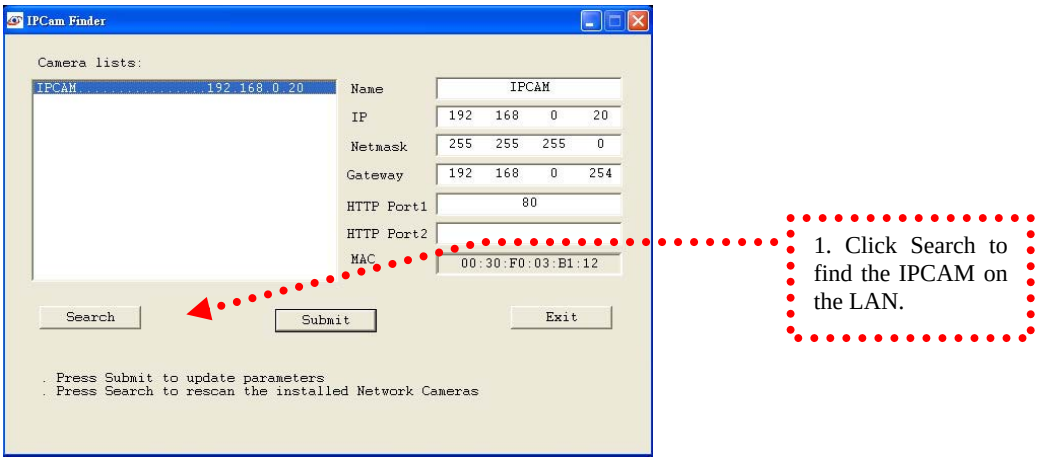
External alarm connector (DI/DO)
See Appendix A for details of D1/DO.



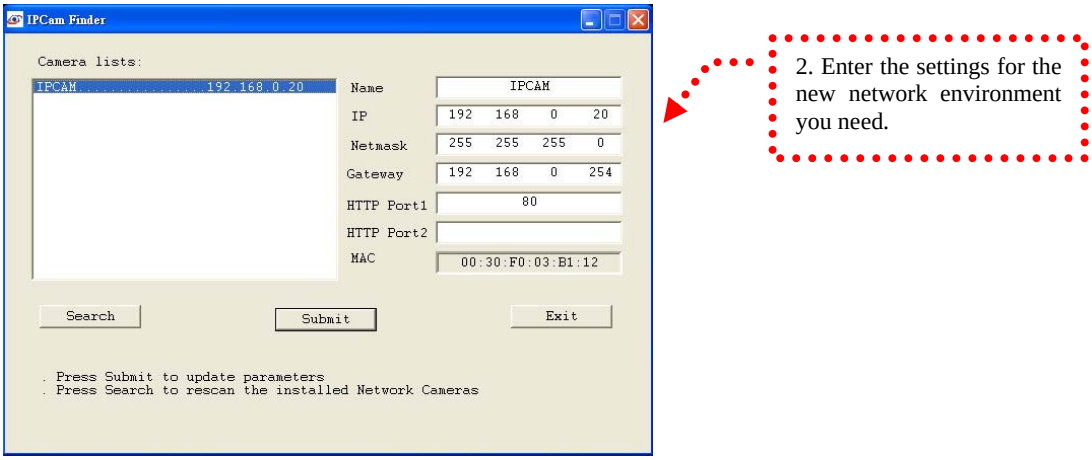
Camera Settings

After the hardware has been installed, insert the supplied CD in the computer and execute the file IP Finder.exe following the steps below to search for and change the IP address of the camera.

1. **Start the machine.**
   Execute the IP Finder.exe from the supplied CD.
2. **Find the camera (Search)**
   Search for the product from your LAN. The factory IP setting 192.168.0.20 appears on the screen.

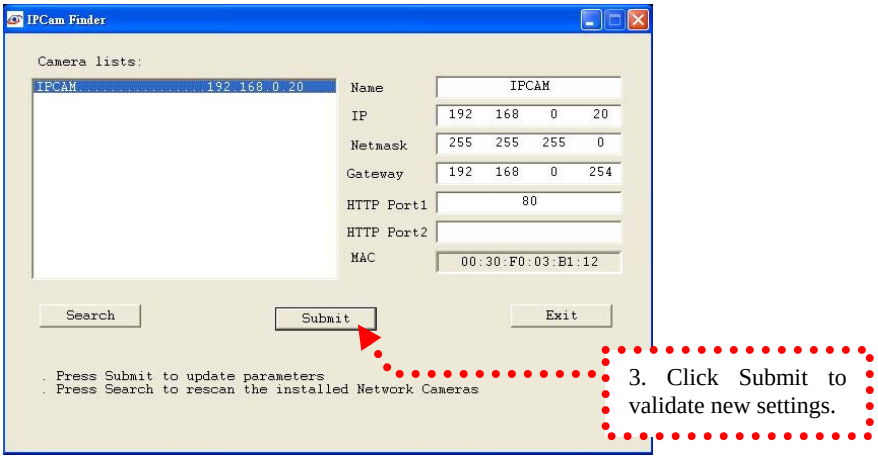


3. **Changing the IP address and related settings for the network environment**
   When you find the camera, click it and the settings will appear on the right side. Change the settings for the new network environment you need.



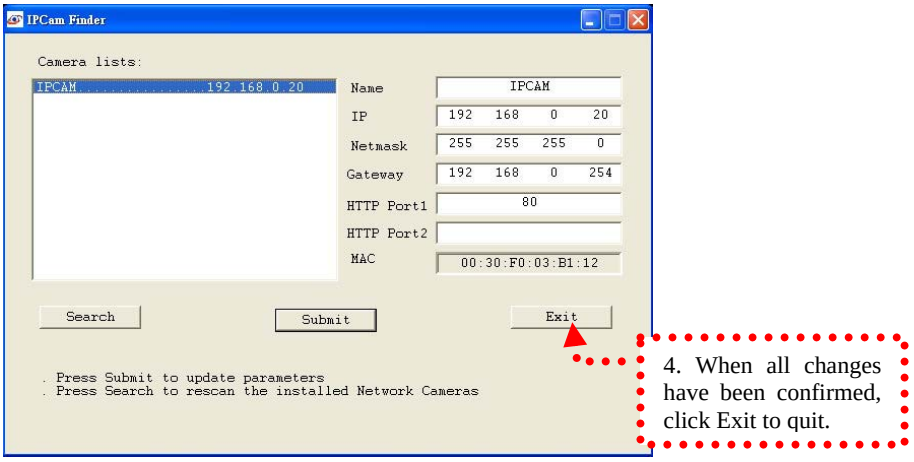
※ You must enter new settings in the IP, Netmask and Gateway fields and keep the settings in other fields unchanged.

4. **Submit data (Submit)**
   Click Submit to validate new settings.



5. Confirmation

When all changes have been confirmed, click "Exit" to quit.



Notes:

1. **The IP FINDER can only find the IP addresses of cameras that share the same hub on the LAN. For information about finding IP addresses on the Internet, refer to the "DDNS Setting", or "UpnP Setting".**

2. **All our camera/network server products can be found and changed using the IP FINDER software.**

3. **If the IP FINDER software cannot be executed, check your antivirus software or firewall to remove the block.**

4. **Field description: You can give a name to your camera (such as "PT_IP" or "PT-IP").**
   You can change the settings for IP, Gateway Address and Network Mask to meet the requirements of your network environment. The product uses HTTP Port1 and does not support Port2 settings.

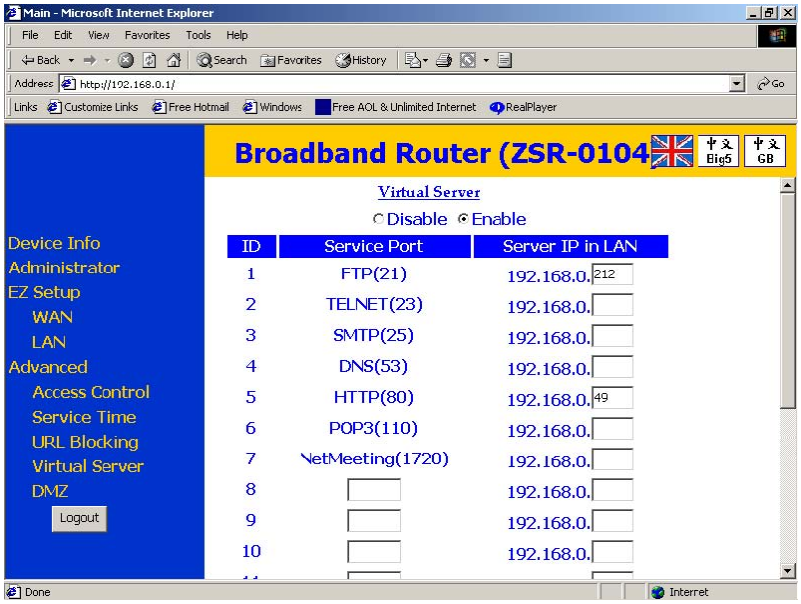
MAC: Factory default network identity of the machine.

Camera Setting from a Router

You can use DHCP when you want to use the camera on the Intranet (LAN). However, the IP must fixed when you want to use the camera on a WAN. For this application, it is required to set up a virtual server on the ADSL router. Follow the steps below to complete the setting:

1. Enter the camera setting page to set a fixed IP. (Refer to the “Network Setting”.) Ex.: 192.168.0.49
2. Enter the ADSL router main setting page. Ex.: Zonet ADSL router
3. Enter the Virtual Server setting page.
   a. Set “mapping of *HTTP Port (80)* to *192.168.0.49* ”.
   b. Restart ADSL router.

After completing the settings, you can operate the camera from a WAN IP Address via the ADSL router.



Example: The Virtual Server setting screen of the Zonet ADSL router

Note 1: The virtual server setting screen is not the same for all ADSL routers. Refer to the manual of the ADSL router you purchased for more information about the setting.

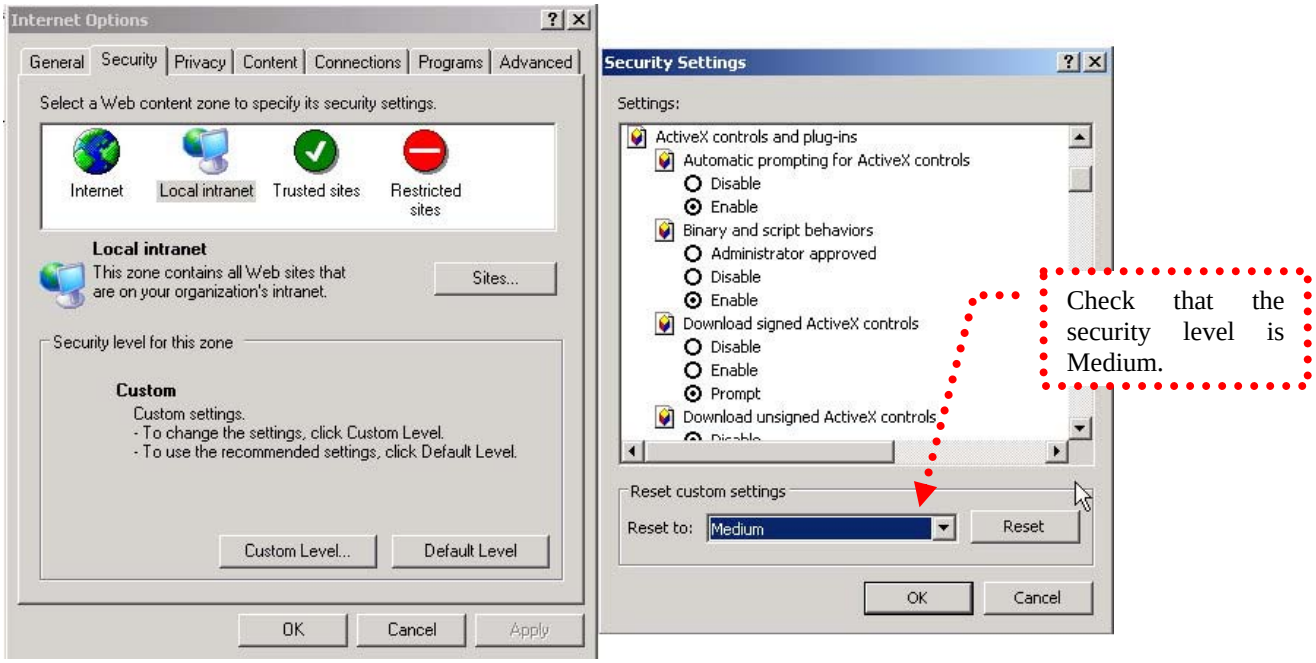
Note 2: Not all virtual servers on the ADSL routers support the external control. If possible, use the DMZ function to perform NAT and Firewall penetration.
DMZ stands for De-militarized zone. It is a small section of network between the internal network (militarized zone) and the external network. This zone can be sensed and protected by IDS, monitored by the firewall or detected by other safety mechanisms.

Change the Internet Explorer Setting

This product uses ActiveX Control to play images and sound on your PC. The ActiveX Control application software will be downloaded to your PC when you connect it to the Internet. To ensure successful download of the software, the Internet Explorer "security settings" must be changed accordingly. Make sure that the security level is set to **Medium**, the commonly used default security level.

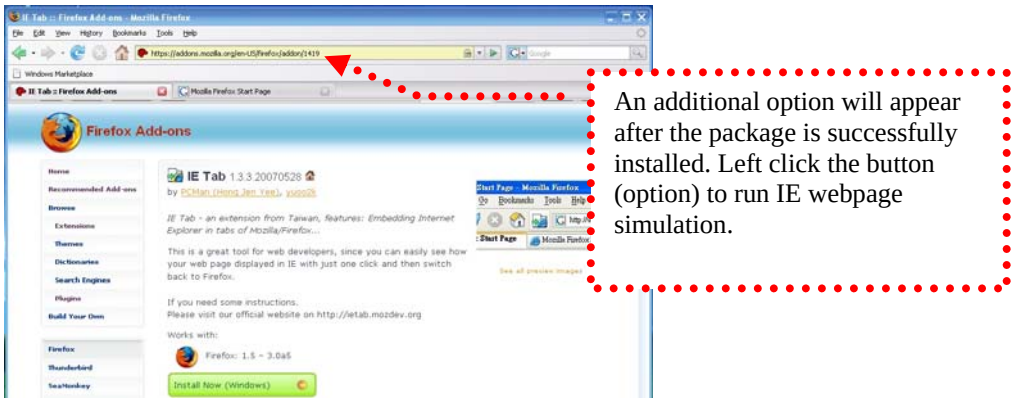
Steps:

Open the IE browser ➔ Tools ➔ Internet Options ➔ Security ➔ Custom Level



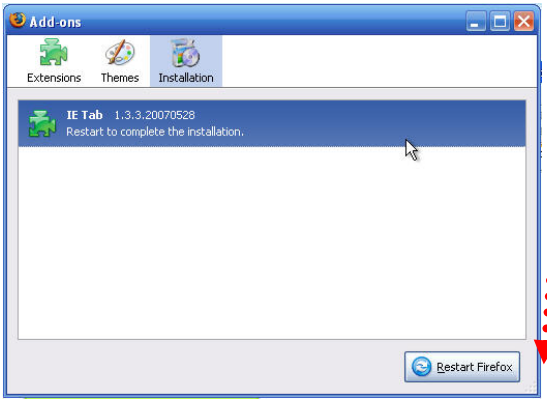
Check the security setting

1. This product supports IE 6.0 or above.
2. If you are using Firefox, please download and install the IE Tab kit first from https://addons.mozilla.org/en-US/firefox/addon/1419vu8 y930.

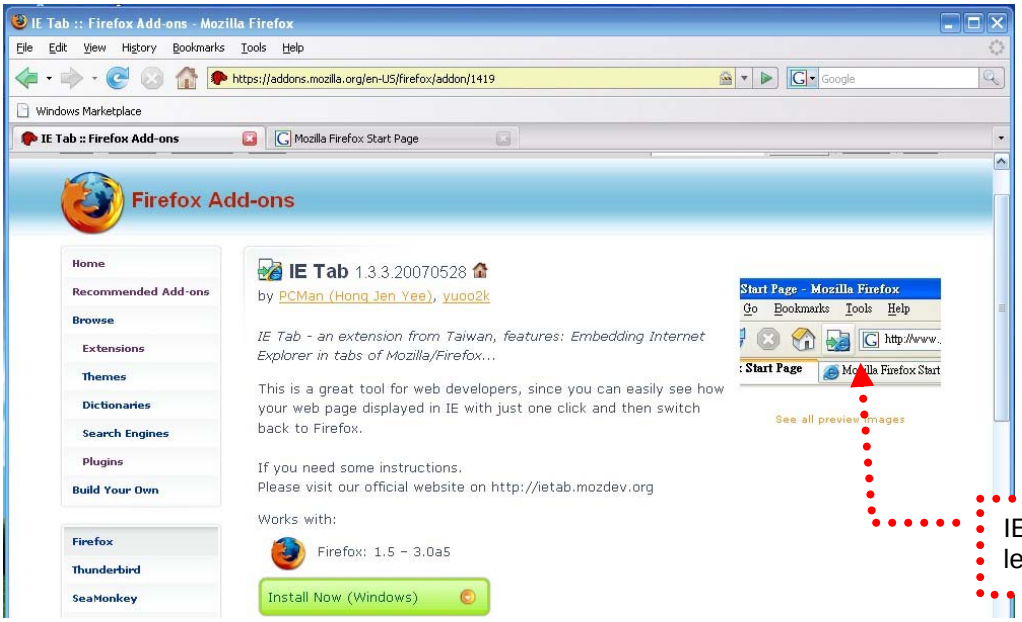

Firefox Add-ons
IE Tab
An additional option will appear after the package is successfully installed. Left click the button (option) to run IE webpage simulation.

Software Installation
You have asked to install the following item:
IE Tab
Unsigned
from: https://addons.mozilla.org/en-US/firefox/
Malicious software can damage your computer or violate your privacy.
You should only install software from sources that you trust.
Install Now
Cancel
IE Tab 1.3.3.
by PCMan (Hong Jen
IE Tab - an extensio
Explorer in tabs of M
This is a great tool f
your web page displa
back to Firefox.
If you need some ins
Please visit our offici
Works with:
Firefox: 1.5
Install Now (Windows)

Install IE Tab.



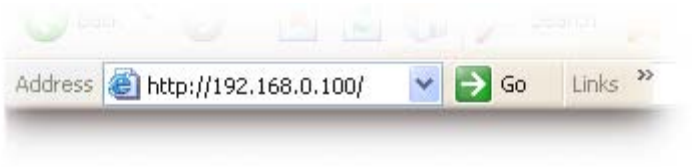
Restart Firefox.


IE Tab :: Firefox Add-ons - Mozilla Firefox
File Edit View History Bookmarks Tools Help
https://addons.mozilla.org/en-US/firefox/addon/1419
Windows Marketplace
IE Tab :: Firefox Add-ons
Mozilla Firefox Start Page
Firefox Add-ons
Home
Recommended Add-ons
Browse
Extensions
Themes
Dictionaries
Search Engines
Plugins
Build Your Own
Firefox
Thunderbird
SeaMonkey
IE Tab 1.3.3.20070528
by PCMan (Hong Jen Yee), yuoo2k
IE Tab - an extension from Taiwan, features: Embedding Internet Explorer in tabs of Mozilla/Firefox...
This is a great tool for web developers, since you can easily see how your web page displayed in IE with just one click and then switch back to Firefox.
If you need some instructions.
Please visit our official website on http://ietab.mozdev.org
Works with:
Firefox: 1.5 - 3.0a5
Install Now (Windows)
Start Page - Mozilla Firefox
Go Bookmarks Tools Help
Start Page
See all preview images

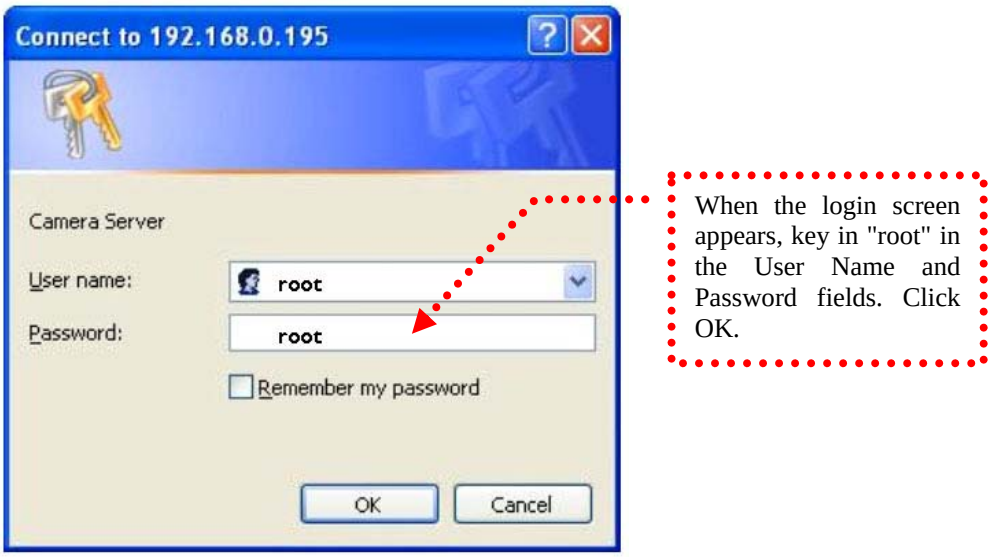
IE Tab online learning.

Enter the Main Page

1. Open the IE browser and key in the IP address of the product.



Key in the IP address of the camera



Camera login screen

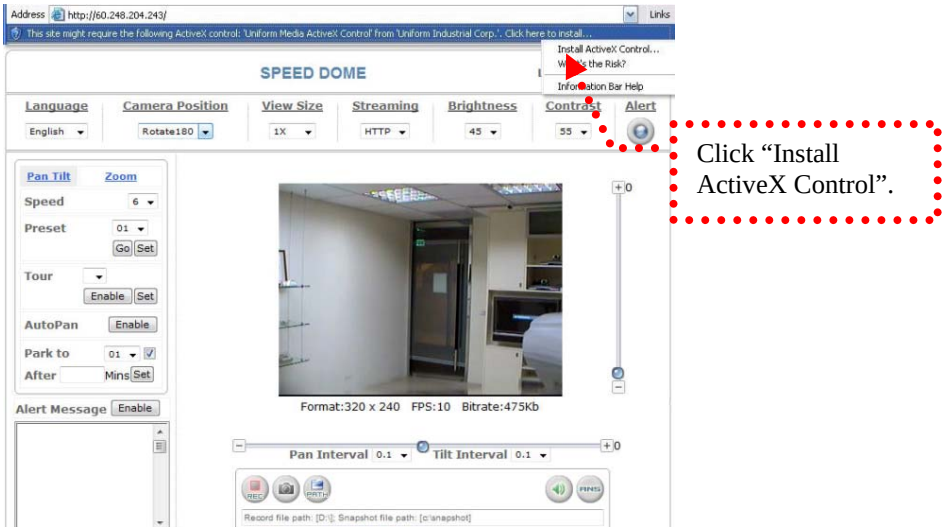
2. Key in the default “username” and “password”.

   Default User Name: **root**

   Default Password: **root**

   You can access the camera as an administrator by default and set up for other users or privileges from the “Basic Settings” -> “User”.

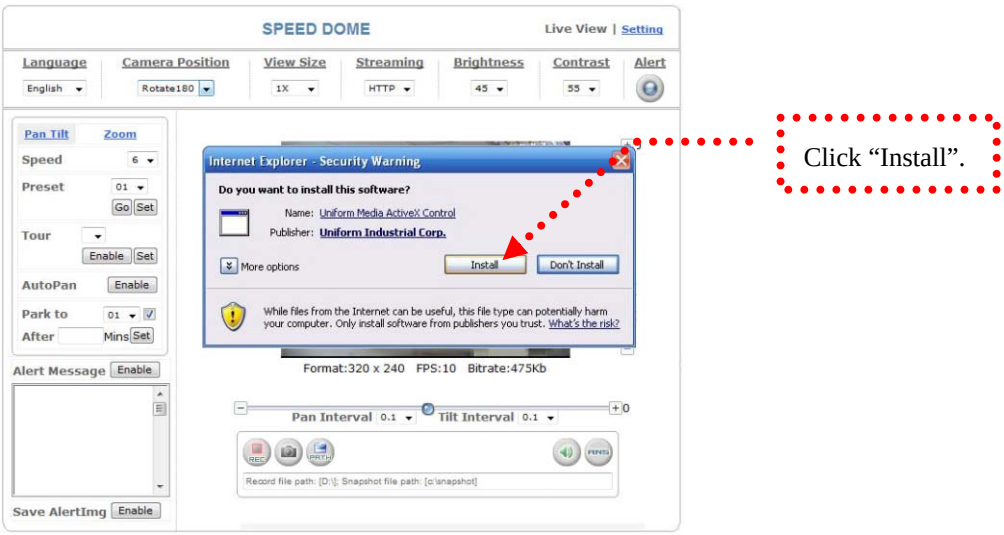
3. Installation of Internet Explorer ad-hoc components
   When the username and password are confirmed, a control setup screen pops up under the IE address bar. Click “Install ActiveX Control” to install the controls.



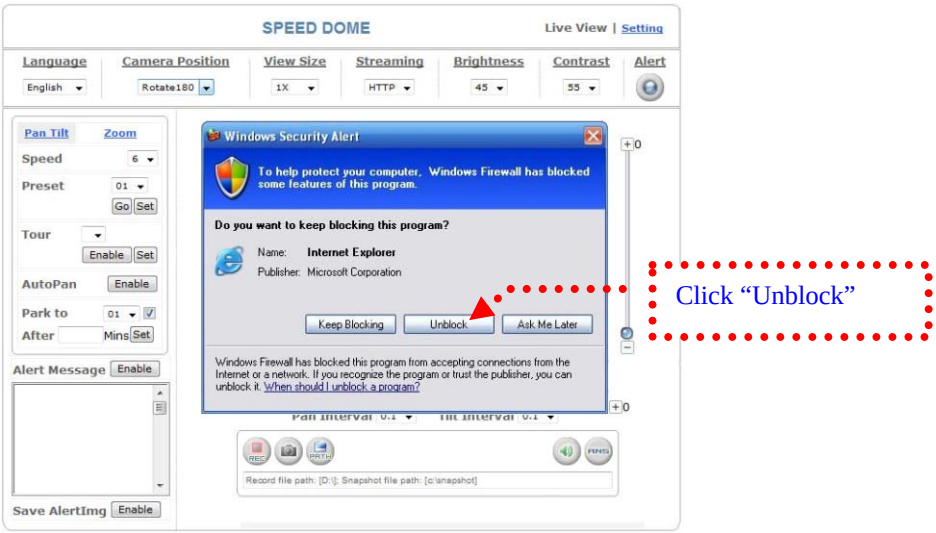
Setup prompt screen

4. The security warning screen appears. Click "Install".

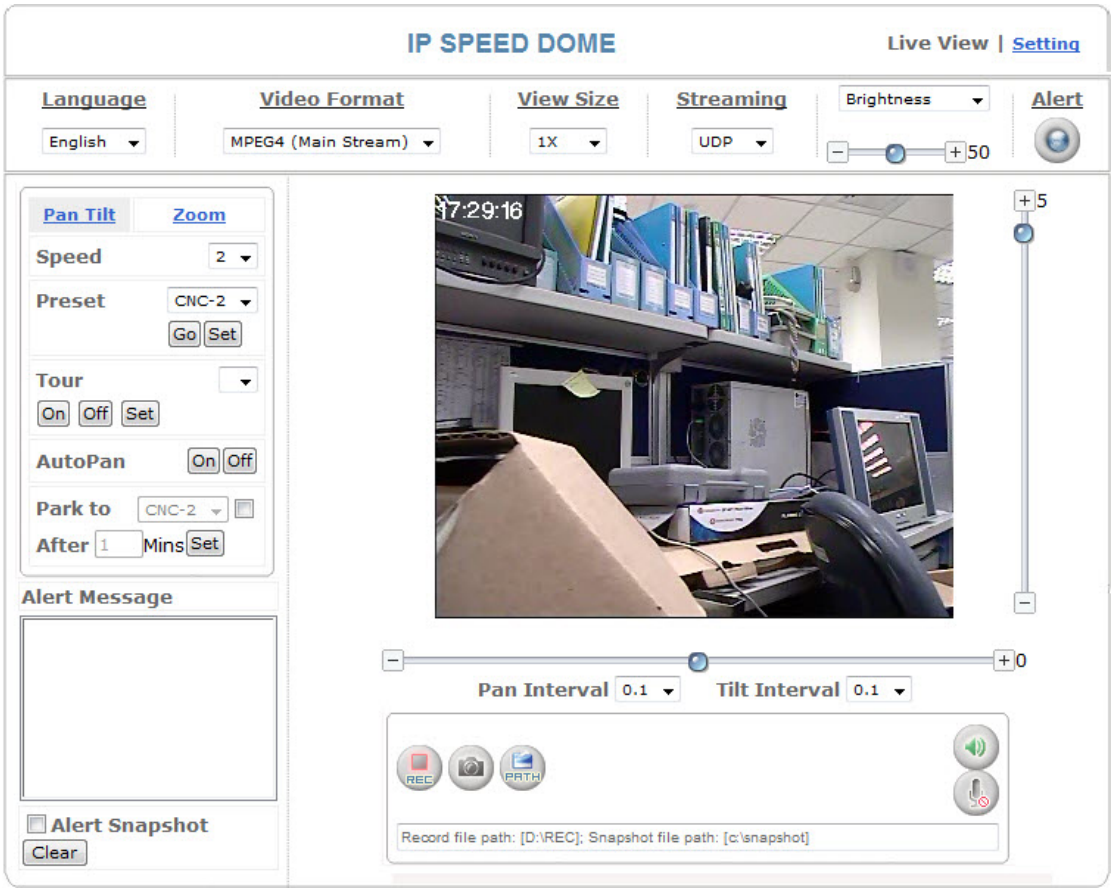
The ActiveX Control is named "UIC ActiveX Control". This software is owned by UIC and well certified. You can use it without any doubts about its validity.



5. If a firewall block window pops up, select Unblock.



6. When installation of the ActiveX control is completed, the image transmitted from the camera and the operation interface appear on the screen.

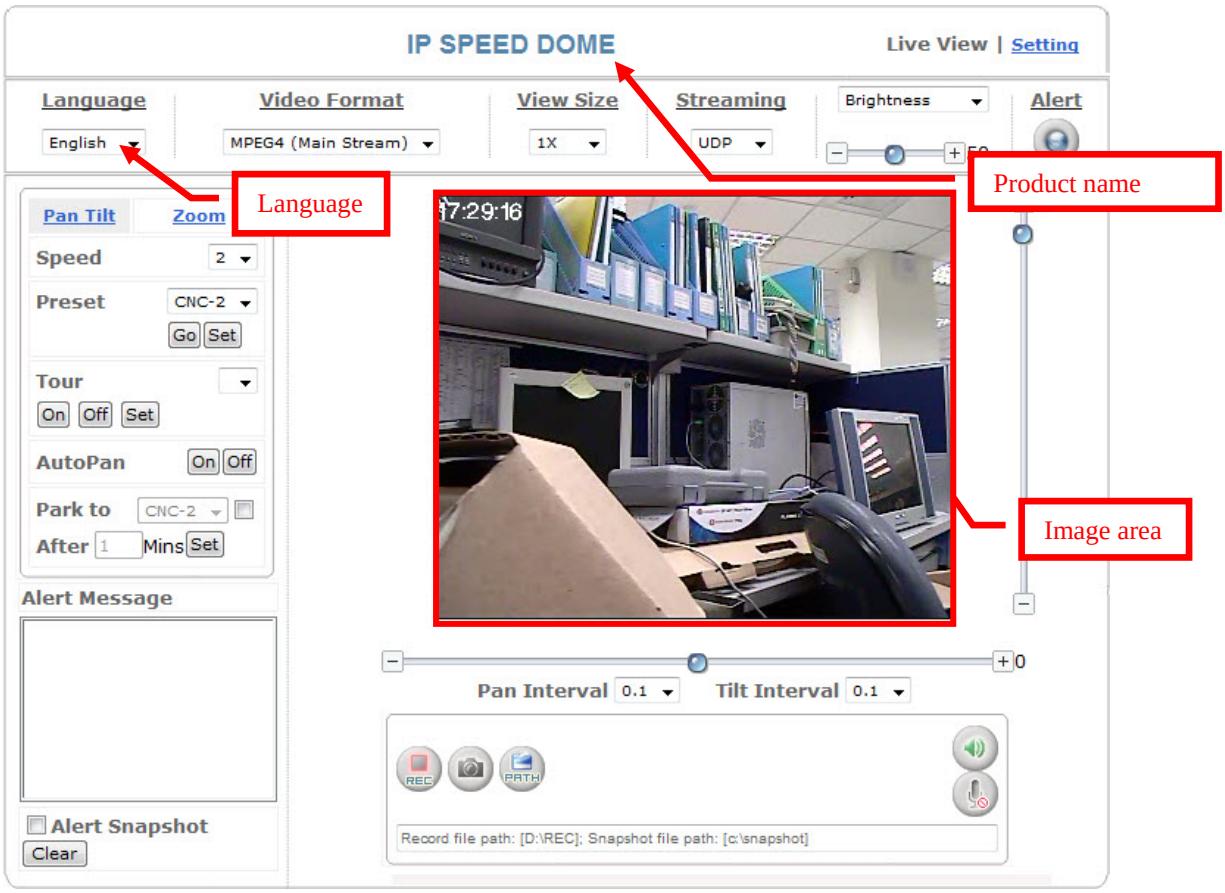


Camera Main Page

Descriptions:

1. **Image area:** The streaming will show at the image area.

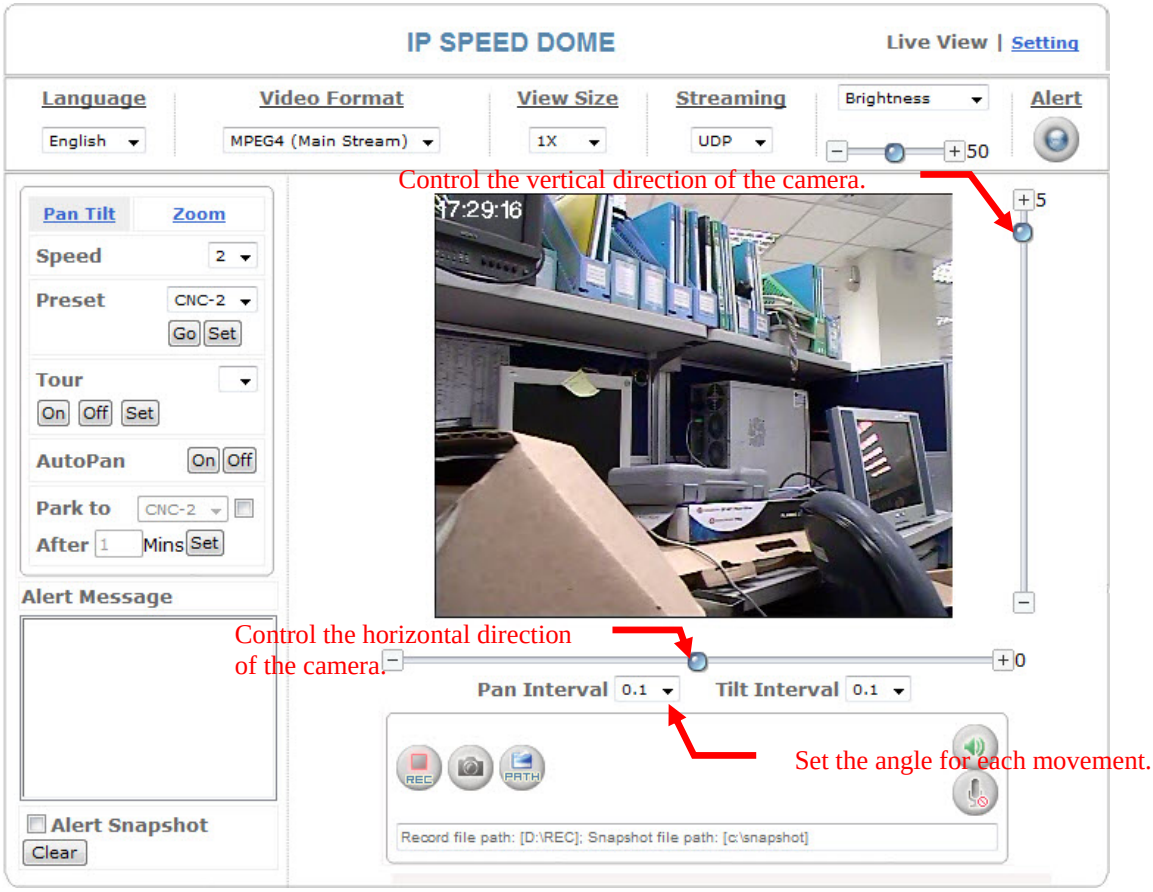
2. **Language (interface language selection):** This product currently supports three languages: English, Simplified Chinese, and Traditional Chinese.



Attention: Please change the streaming setting to HTTP if nothing appears in the image area.

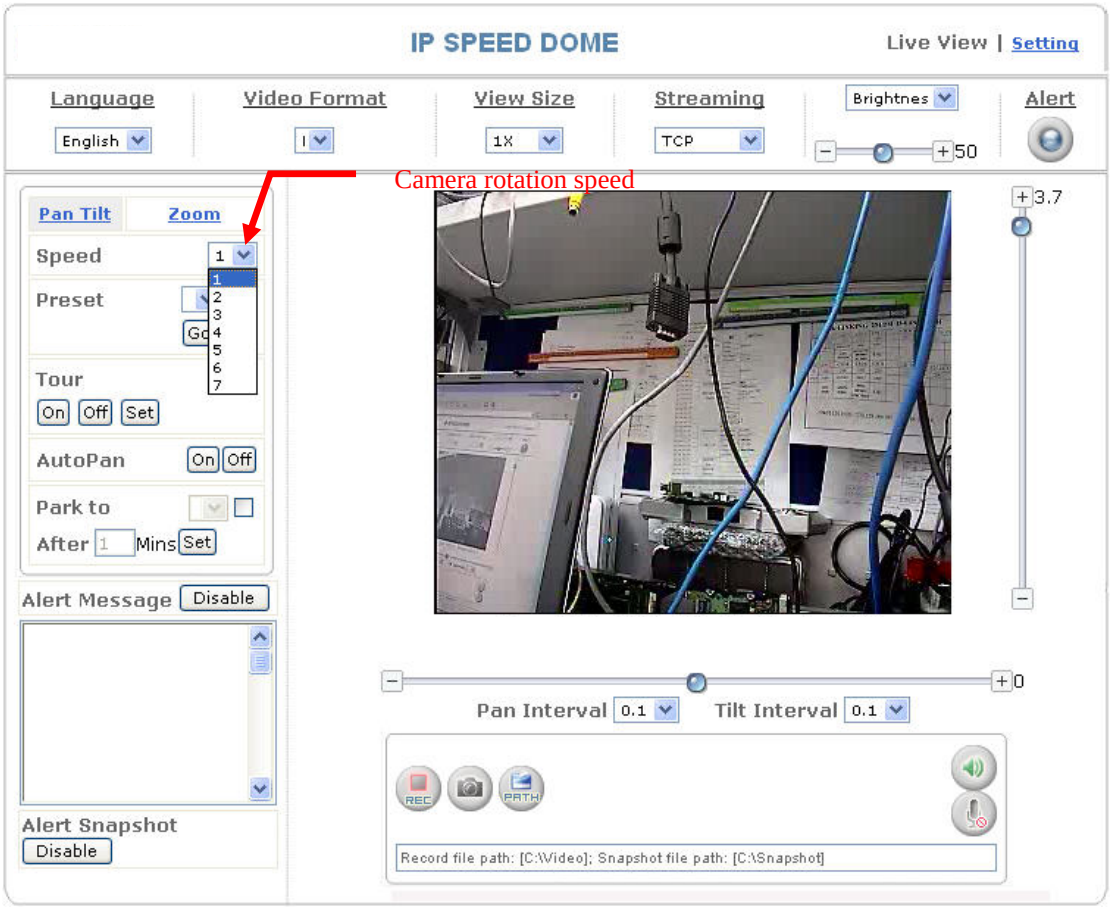
Control Panel Description

1. Pan/Tilt direction control: This function controls the camera to move up, down, left or right. You can directly drag the small ball on the control bar for quick positioning or click the [+] or [−] button at both ends of the control bar to position precisely. When precise positioning is used, you can set the angle for each movement of the camera (refer to the following picture). You can also click the image to control the direction of the camera.



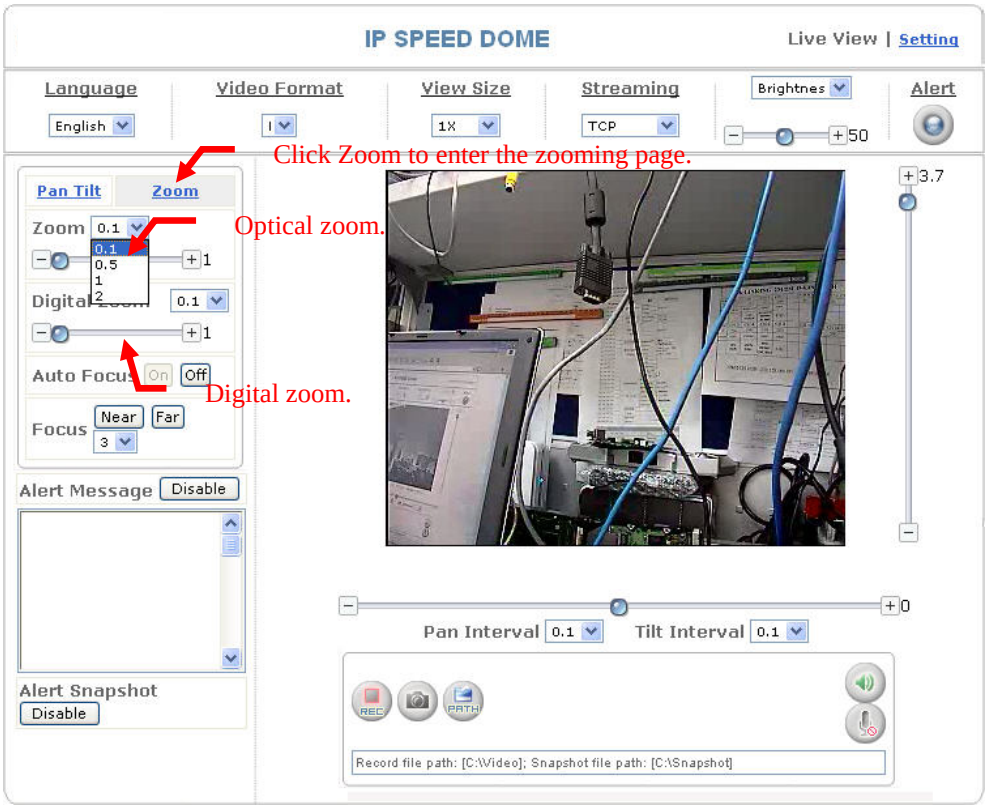
2. Speed: This function controls the speed of rotation in the Preset, Tour, and AutoPan modes. 7 options are available. "1" is the slowest and "7" is the fastest speed.

Speed Option	1	2	3	4	5	6	7
Angle/second	1°	16°	32°	48°	64°	80°	95°



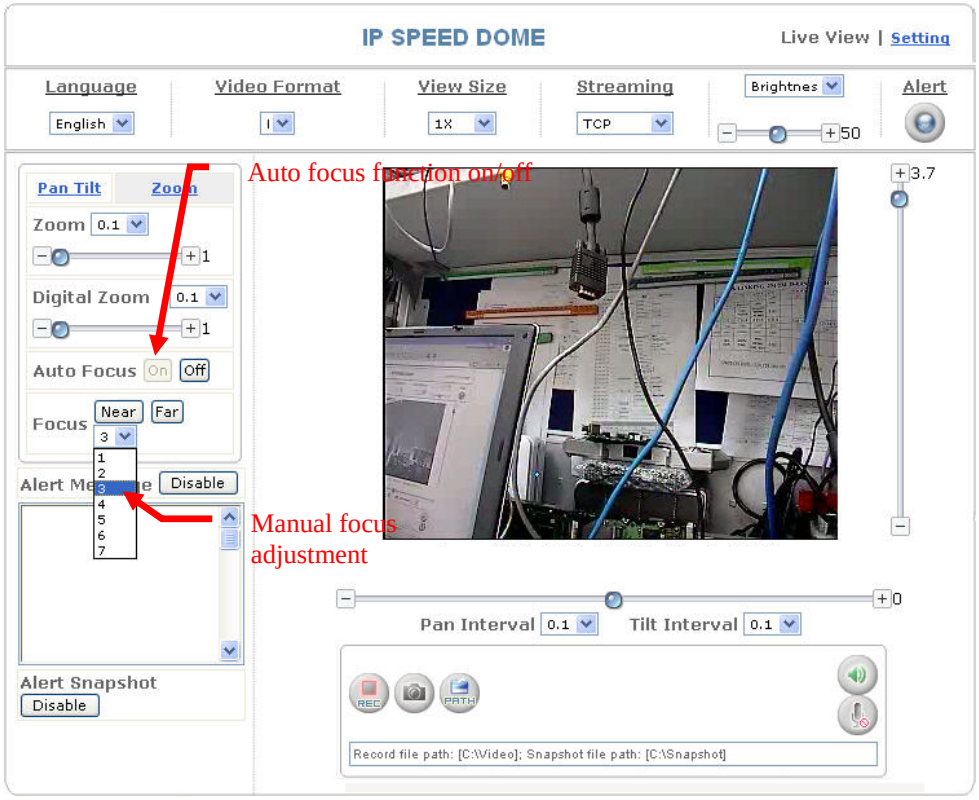
3. **Optical ZOOM:** A build-in 18x or 26x or 36x optical lens (depending on the camera model) is used for zooming the image. You can directly drag the small ball on the control bar for quick zooming or click the [+] or [—] button at both ends of the control bar to zoom precisely. The movement speed of the lens is adjustable.

4. **Digital ZOOM:** The build-in 12x digital zooming function can enlarge the picture. You can directly drag the small ball on the control bar for quick zooming or click the [+] or [—] button at both ends of the control bar to zoom precisely. The digital zoom in combination with the optical zoom creates 216x or 312x (depending on the camera model) zooming capability.

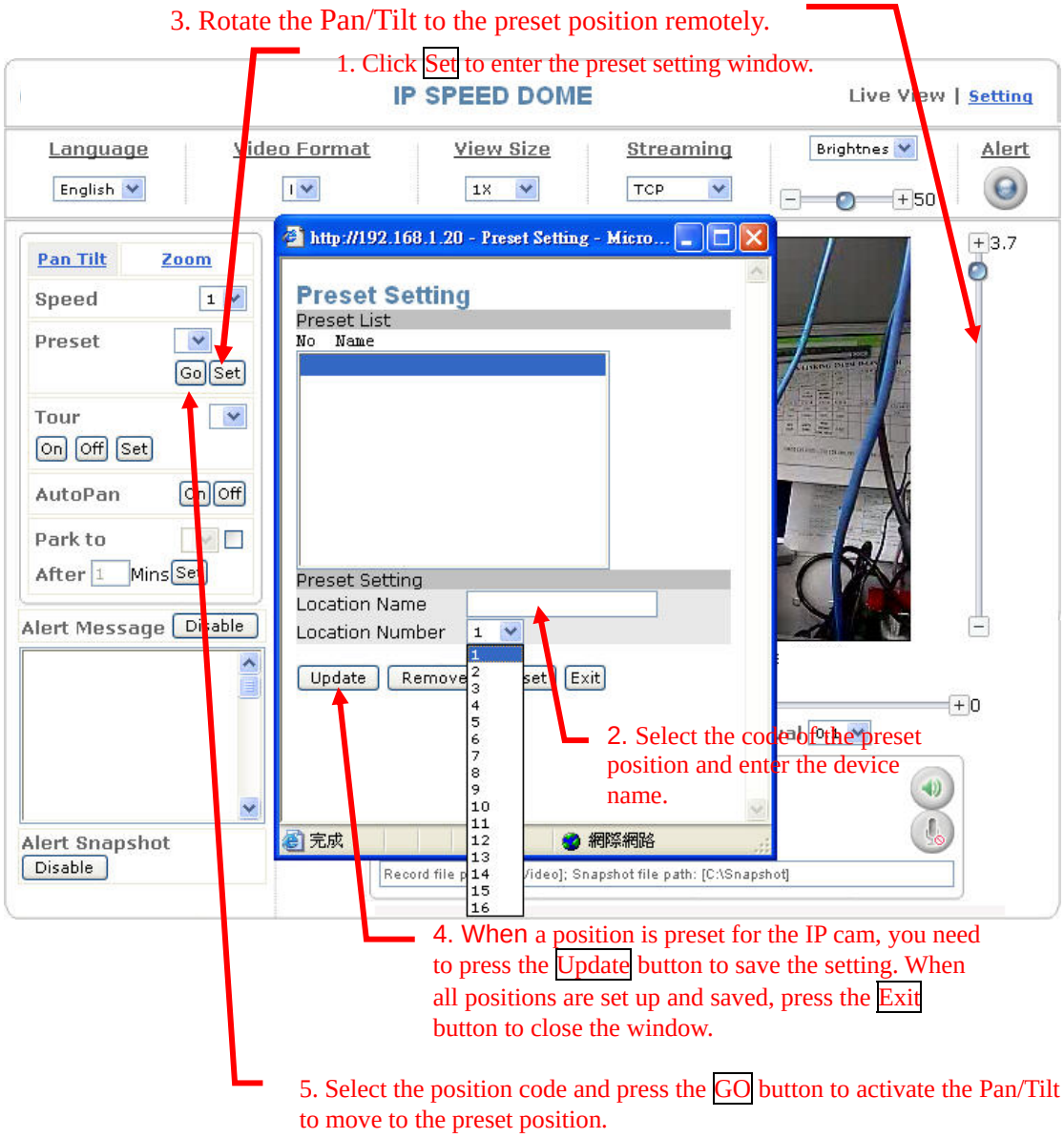


5. Auto Focus: The default is On. You can click Off to enter the manual focus mode.

6. Focus: In the manual focus mode, you can choose Near or Far and 7 speed options are available.



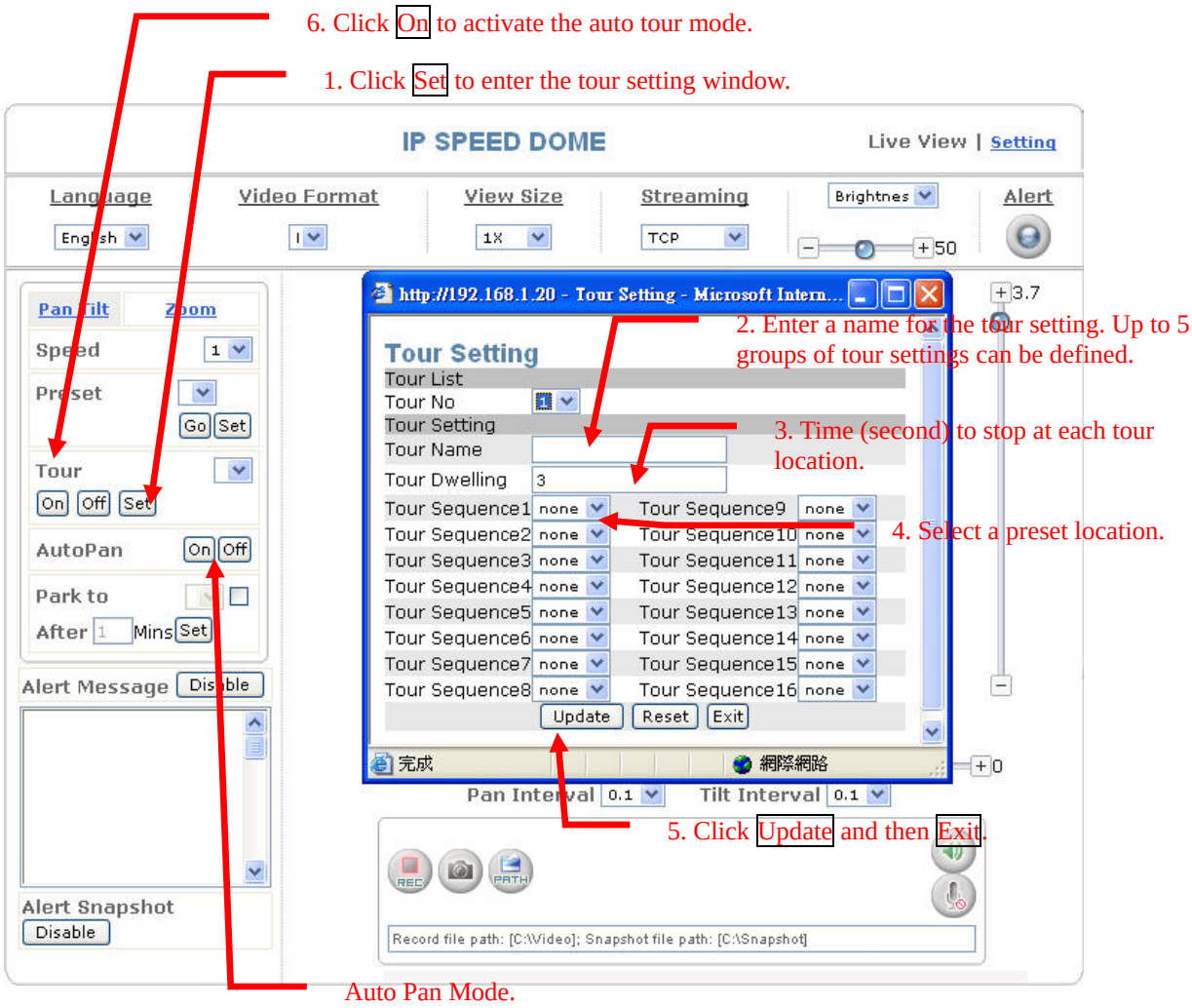
7. Preset: You can use this function to preset the location that the camera will rotate to (64 locations).
This function can save the location you want to monitor and the camera will automatically rotate to the saved location when you click the number of that location. Precise positioning can be achieved without the need for manual control.



8. Tour: This function can enable or disable the auto tour mode for the selected location.

This function can only be enabled after the preset location is selected.

You can define up to 5 groups of tour settings.



9. AutoPan: You can use this function to enable or disable the automatic horizontal tour mode.

In the AutoPan mode, the camera automatically rotates counterclockwise and keeps horizontally rotating till disabled.

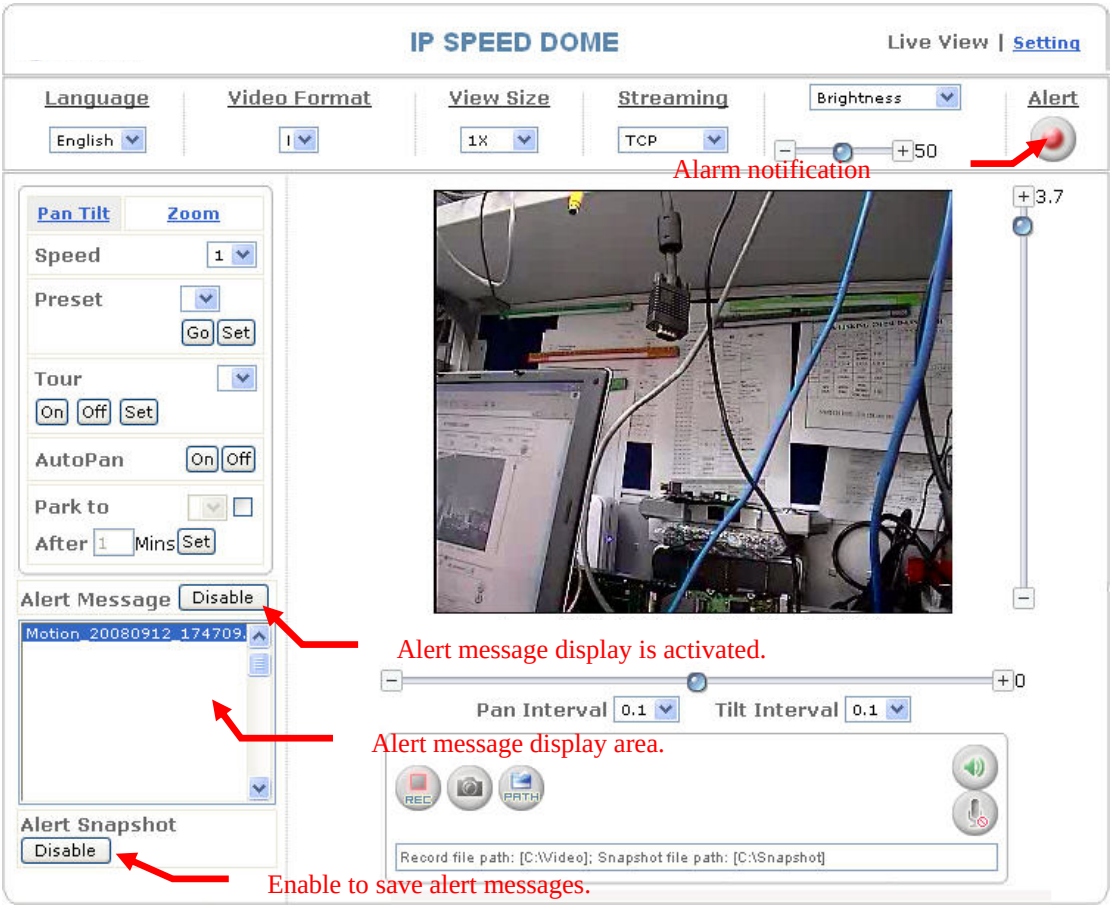
10. Park to: You can use this function to select a preset location to which the camera will return when the PTZ function is not operated any more.

11. After minutes: You can use this function to define the time interval at which the camera will return to the preset location when the PTZ function is not operated any more.

Alert Message Description

1. Alert: Notification of alarm

If the camera detects a movement or an alarm, the Alert button will flash to alert the monitoring personnel. Click the Alert button to stop the flashing.



2. Alert Message:

Alert Message: The Enable/Disable button can activate or stop the display of the alert message. When Disable is selected, no message will show.

Alert Snapshot: When it is ON, the alert video will be saved in the quick capture path.

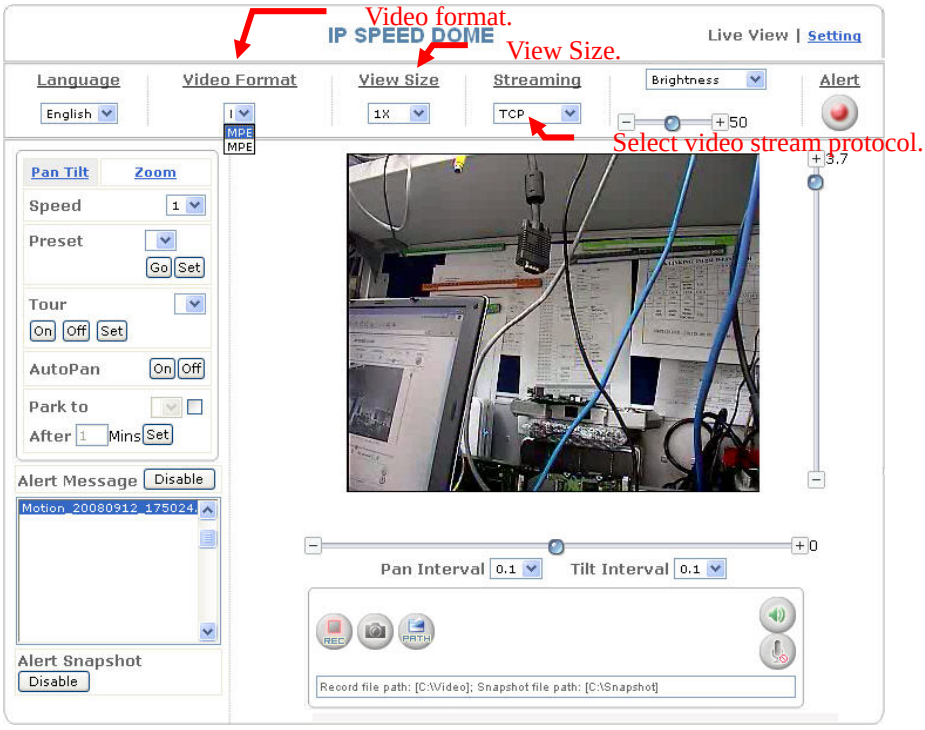
When it is OFF, the alert video will not be saved and only the alert message will display.

Double click the message to view details. When an alert is activated, an alert message will display on the screen (50 messages, max.). When you exit this page, the message will be cleared automatically. You can also clear the message manually. (See Setup/Application Service Setup/Event/Event for details of alarm setup.)

Video Description

1. Video Format: sets the format for streaming
MPEG4 (main stream): Stream mode at MJPEG+MPEG4 or Dual MPEG4
MPEG4 (sub stream): Stream mode at Dual MPEG4
Motion JPEG: Stream mode at MJPEG+MPEG4
See Setting > Video / Image > Video for details.

2. View Size: selects the size of the image
Select the size of the image from 0.5 to 4 X.
Note: It's not recommended to use 4x zoom in size to view the video since the image will be abrasive due to the digital zoom effect.



3. Streaming: sets the video stream protocol (HTTP is recommended**)**

This product provides three different video streaming protocols: UDP, TCP, and HTTP. HTTP is recommended because it allows the video stream to go through the firewall. (Refer to Setting/Basic Setting/Network/Streaming for more information).

UDP: provides the fastest but most unreliable transmission service. Video steams are transmitted through UDP Port (50000~60000 by default) to ensure the fastest image transmission. However, video fragment or mosaics may occur due to poor transmission quality.

TCP: provides reliable data transmission. Video steams are transmitted through RTSP Port (554 by default) to avoid video fragment or mosaics due to poor transmission quality.

HTTP: Video streams are transmitted through HTTP Port (80 by default) to ensure passing through firewalls.

Comparison between stream protocols

	Tunneling	Pocket Loss	Speed
HTTP	Easy	Fair	Fair
TCP	Fair	Lower	Fast
UDP	Hard	Lowest	Fastest

4. Brightness/Contrast/Saturation

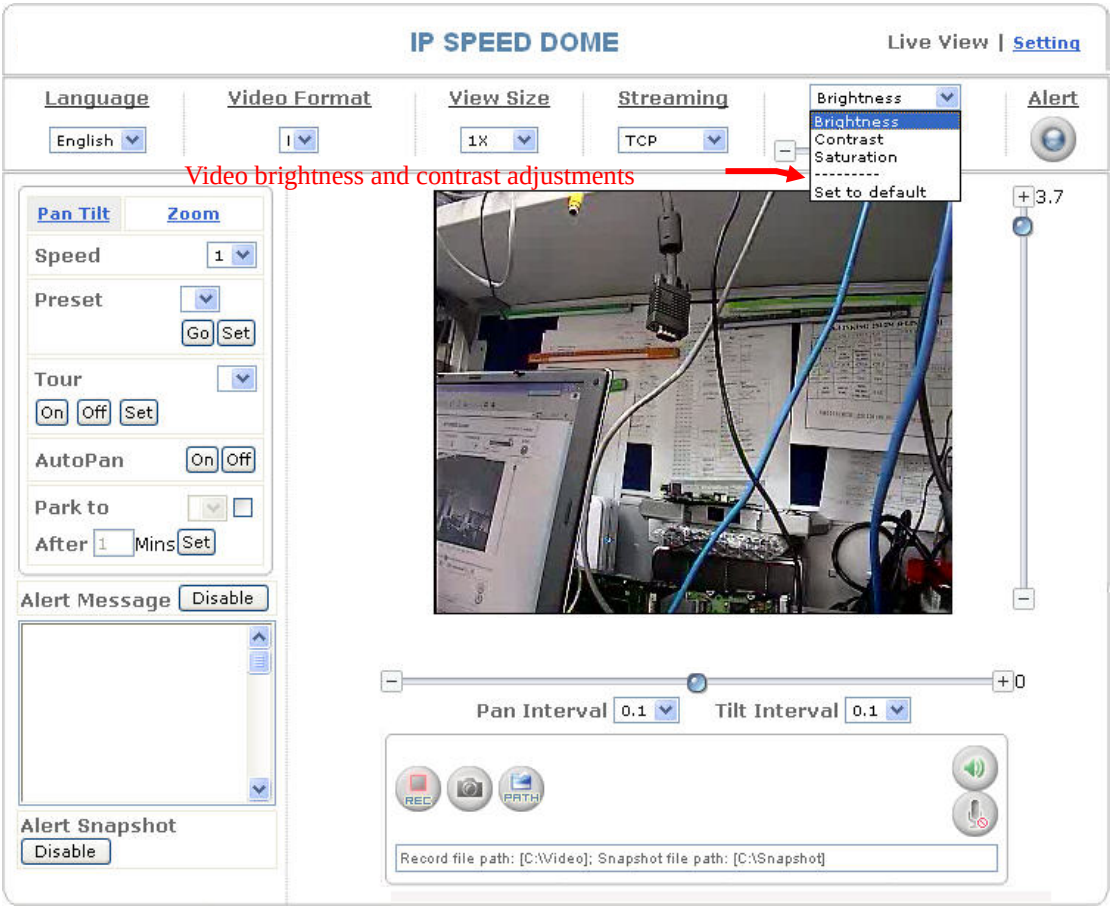
Select the item you wish to adjust, then press the + or – button to adjust video display. Press + means to increase the value and – to decrease the value of the selected item.

Brightness: Adjusts the brightness of videos

Contrast: Adjusts the contrast of colors

Saturation: Adjusts the saturation of colors

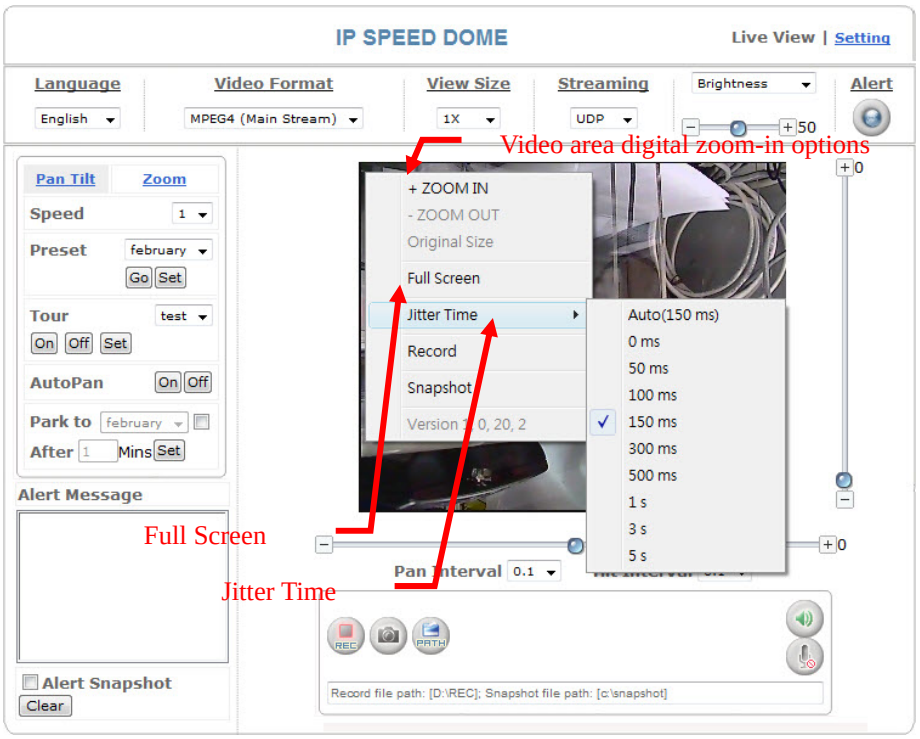
Set to default: Resets all items to default settings



5. **ZOOM IN/OUT:** Click the image area and roll the mouse scroll front to zoom in or back to zoom out. Hold the mouse left button to drag the image.

6. **Full Screen:** Click Full screen to zoom image to whole screen.

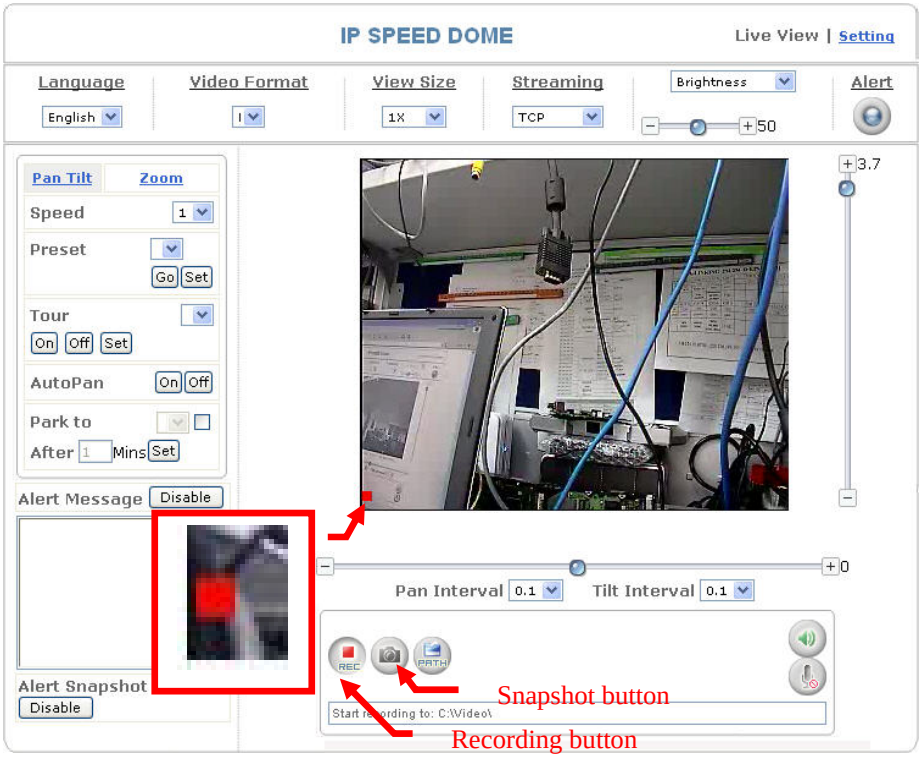
7. **Jitter Time:** This function can help the video smoother. If the video lag caused by bad quality of network, please select 1 s to 5 s to add packet buffer.



Record Description

1. REC: executes the video recording function

Click this button to start video recording and save the image file in the preset directory (C:\video). A red mark appears at the bottom left corner of the image when the recording function is running.

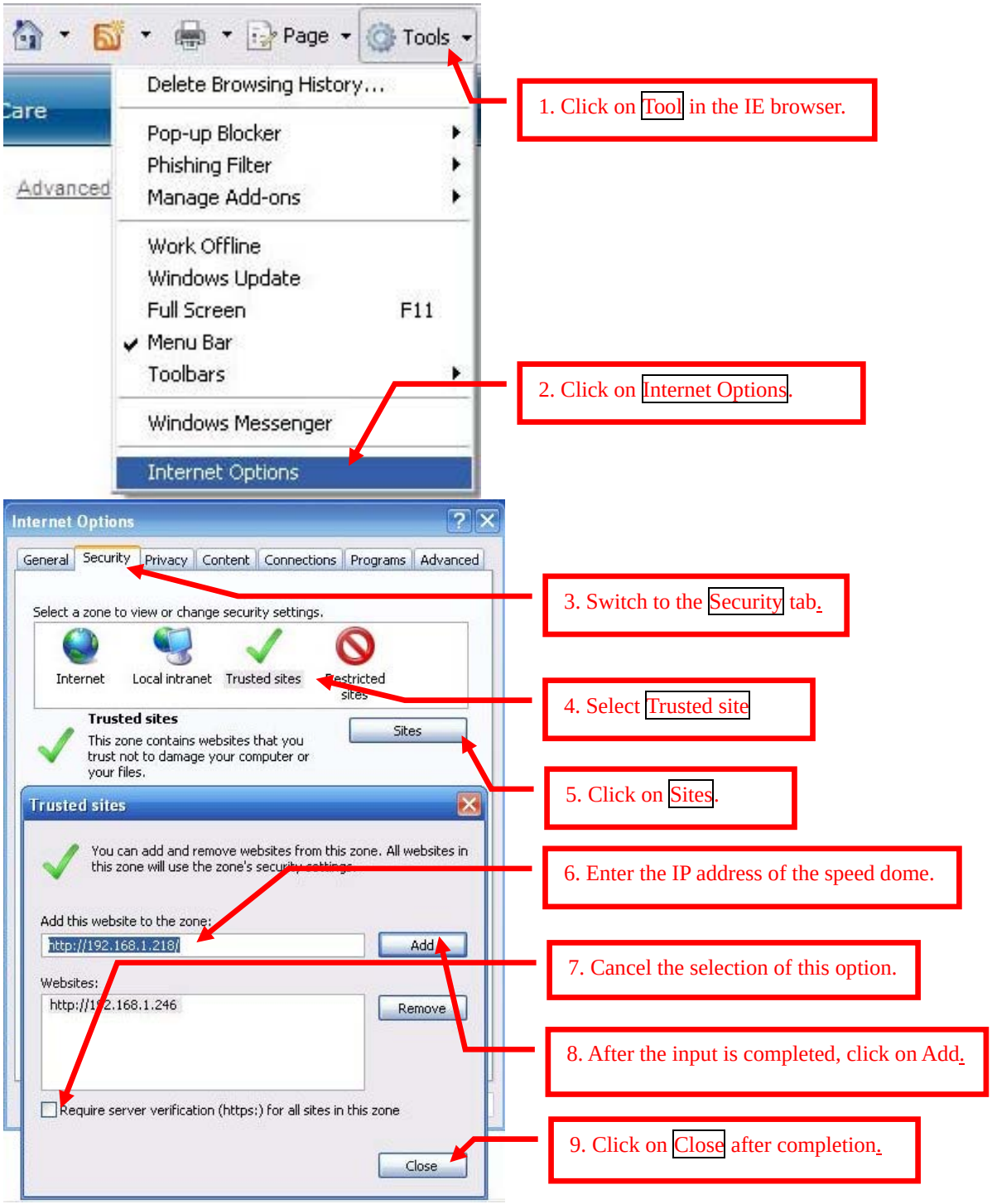


2. Snapshot:

When you click this button, a picture of the current image will be saved in the default folder (C:\snapshot).

The recording or snapshot functions might not be operated if you use VISTA operation system. Please select the WebPages into your trusted sites.

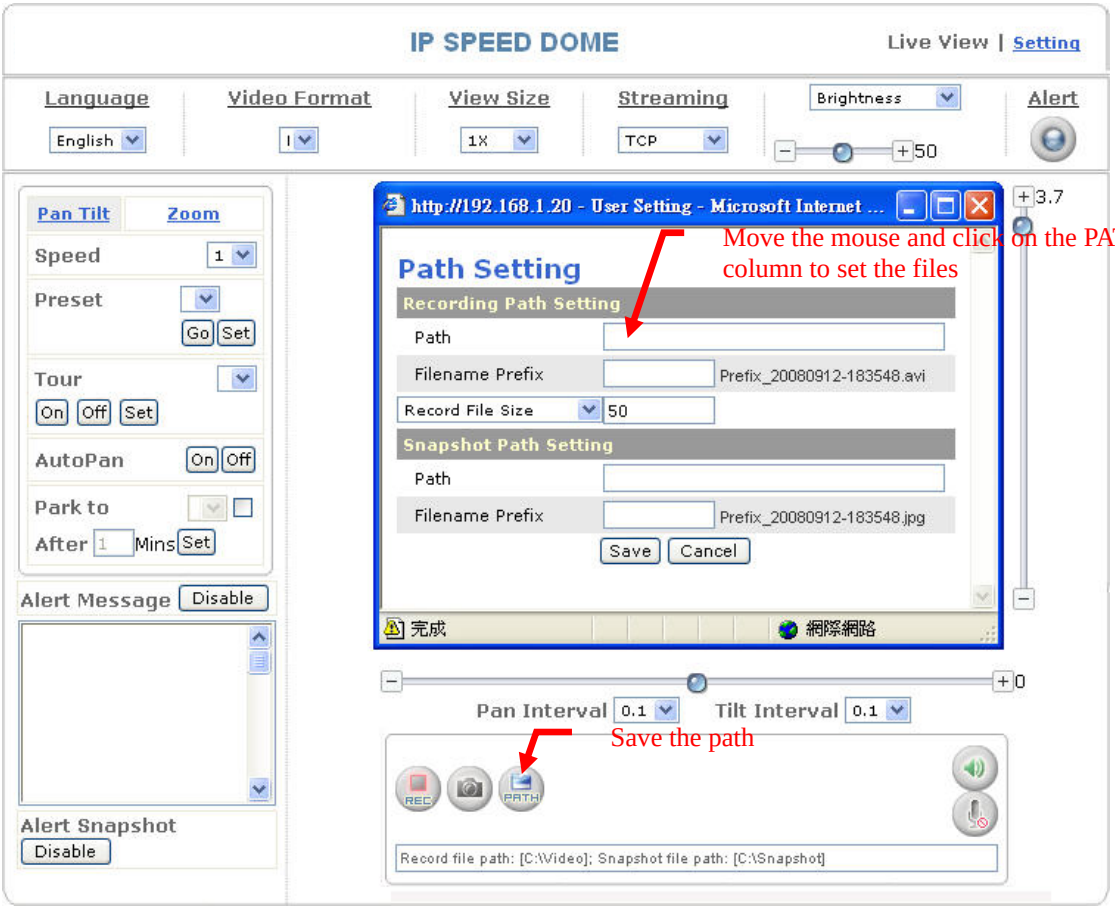
Select the WebPages into your trusted sites.



Record file path: [C:\Video]; Snapshot file path: [C:\Snapshot]
Trusted sites
10. Exit the IE Browser and reopen again. If the setting is correct, Trusted Sites will display.

3. Path: Setting of the path and filename for the recording and snapshot files

The default filename is the creation date of the file. A Prefix setting can be used for identification.



Audio Description

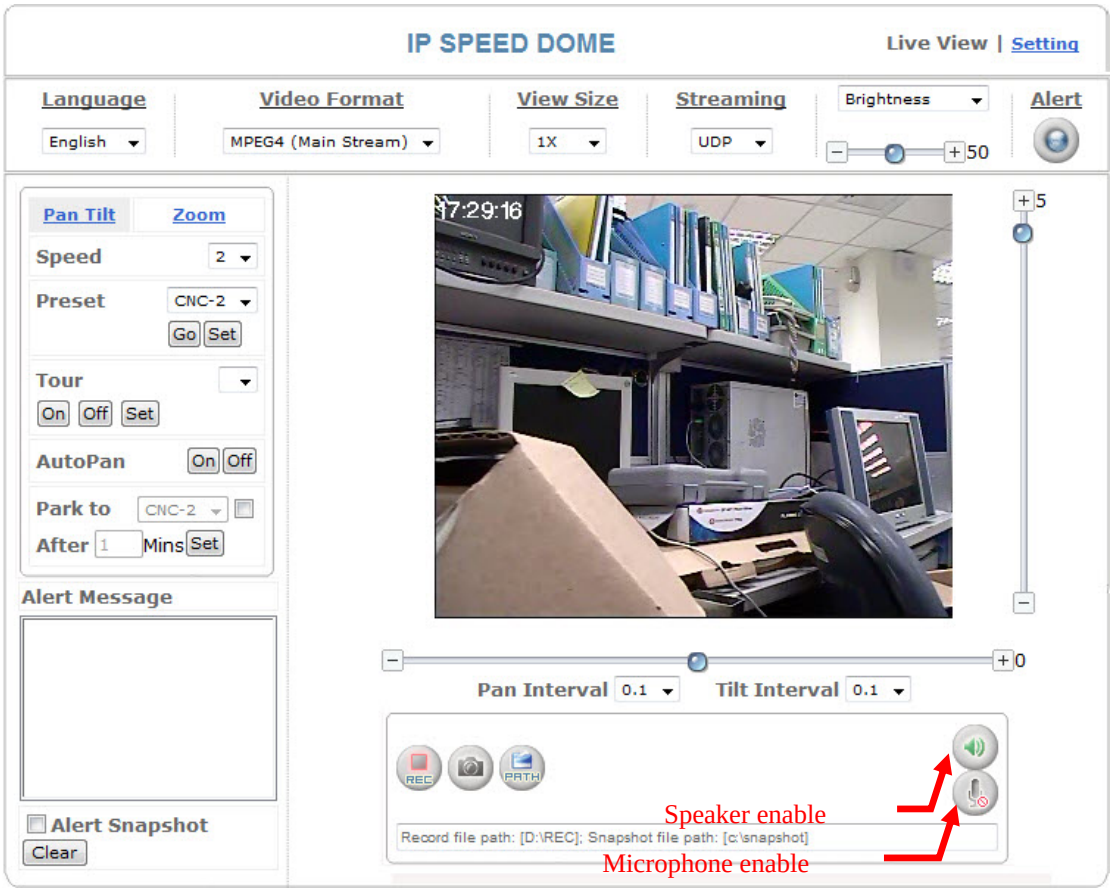
1. Voice communication

When the speaker icon on the screen is green, it means the built-in microphone on the camera is receiving voice signals.

When the microphone icon on the screen is green, it means the local microphone is sending voice signals to external speaker of a remote camera.

See Setup/Basic Setting/Voice for details.

You need a microphone and a speaker connected to your PC when using this function. A speaker must also be installed on the camera. Therefore, please check if the peripherals work properly before using this function.



2. Enable/Disable microphone:

When you click the microphone icon, a "Forbidden" mark will show on the icon and the sound from an external microphone will not be received.

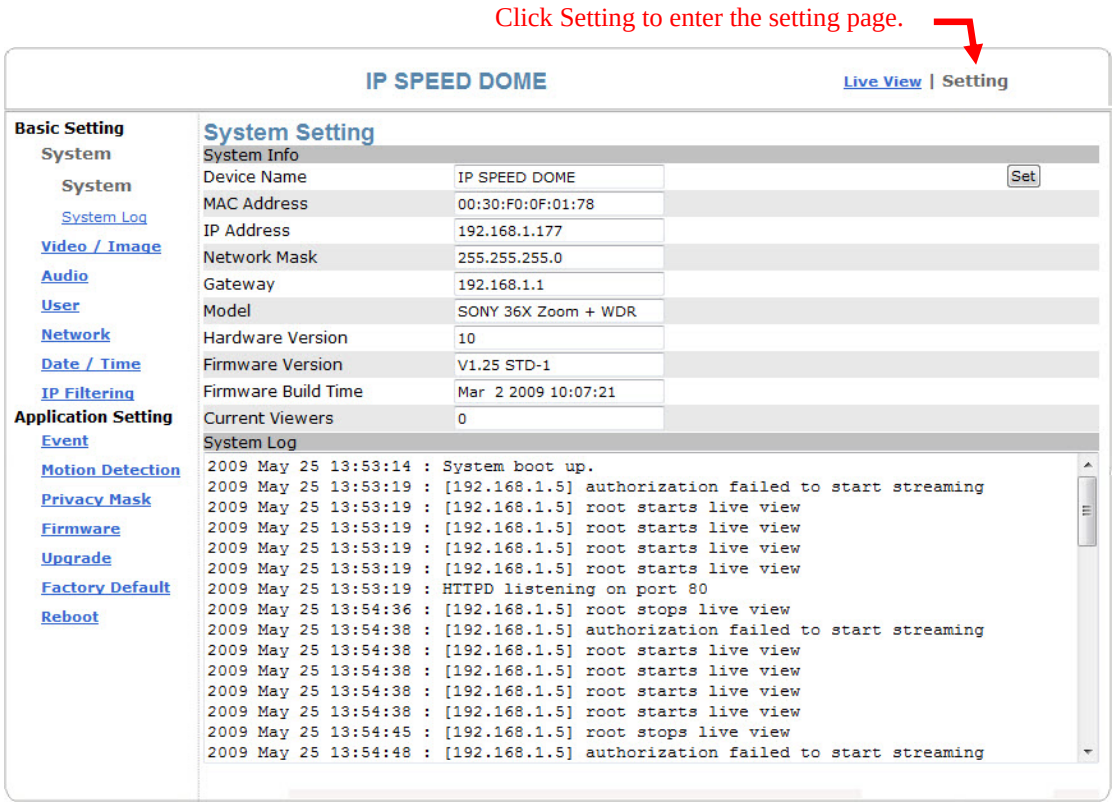
3. Enable/Disable speaker:

When you click the speaker icon, a "Forbidden" mark will show on the icon and the sound from an external speaker will not be played.

System Settings

System setting contains basic and application settings. The basic setting is executed for basic system information, transmission speed, audio/video code, user authorization, date/time, and IP filter, while the application setting is executed for event triggering definition and other relevant settings, definition of the motion detection area, firmware update, reset to factory default, and reboot.

Basic Settings


Click Setting to enter the setting page.
IP SPEED DOME
Live View | Setting
Basic Setting
System
System
System Log
Video / Image
Audio
User
Network
Date / Time
IP Filtering
Application Setting
Event
Motion Detection
Privacy Mask
Firmware
Upgrade
Factory Default
Reboot
System Setting
System Info
Device Name
IP SPEED DOME
Set
MAC Address
00:30:F0:0F:01:78
IP Address
192.168.1.177
Network Mask
255.255.255.0
Gateway
192.168.1.1
Model
SONY 36X Zoom + WDR
Hardware Version
10
Firmware Version
V1.25 STD-1
Firmware Build Time
Mar 2 2009 10:07:21
Current Viewers
0
System Log
2009 May 25 13:53:14 : System boot up.
2009 May 25 13:53:19 : [192.168.1.5] authorization failed to start streaming
2009 May 25 13:53:19 : [192.168.1.5] root starts live view
2009 May 25 13:53:19 : [192.168.1.5] root starts live view
2009 May 25 13:53:19 : [192.168.1.5] root starts live view
2009 May 25 13:53:19 : [192.168.1.5] root starts live view
2009 May 25 13:53:19 : HTTPD listening on port 80
2009 May 25 13:54:36 : [192.168.1.5] root stops live view
2009 May 25 13:54:38 : [192.168.1.5] authorization failed to start streaming
2009 May 25 13:54:38 : [192.168.1.5] root starts live view
2009 May 25 13:54:38 : [192.168.1.5] root starts live view
2009 May 25 13:54:38 : [192.168.1.5] root starts live view
2009 May 25 13:54:38 : [192.168.1.5] root starts live view
2009 May 25 13:54:45 : [192.168.1.5] root stops live view
2009 May 25 13:54:48 : [192.168.1.5] authorization failed to start streaming

Basic Setting > System (System info)

Basic Setting > System > System

- **Basic Setting > System > System Info**

  Device Name: You can set the name for your camera here. Click Set to complete the setting.

  MAC Address, IP Address, Network Mask, and Gateway: Network information.

  Firmware: Firmware version information.

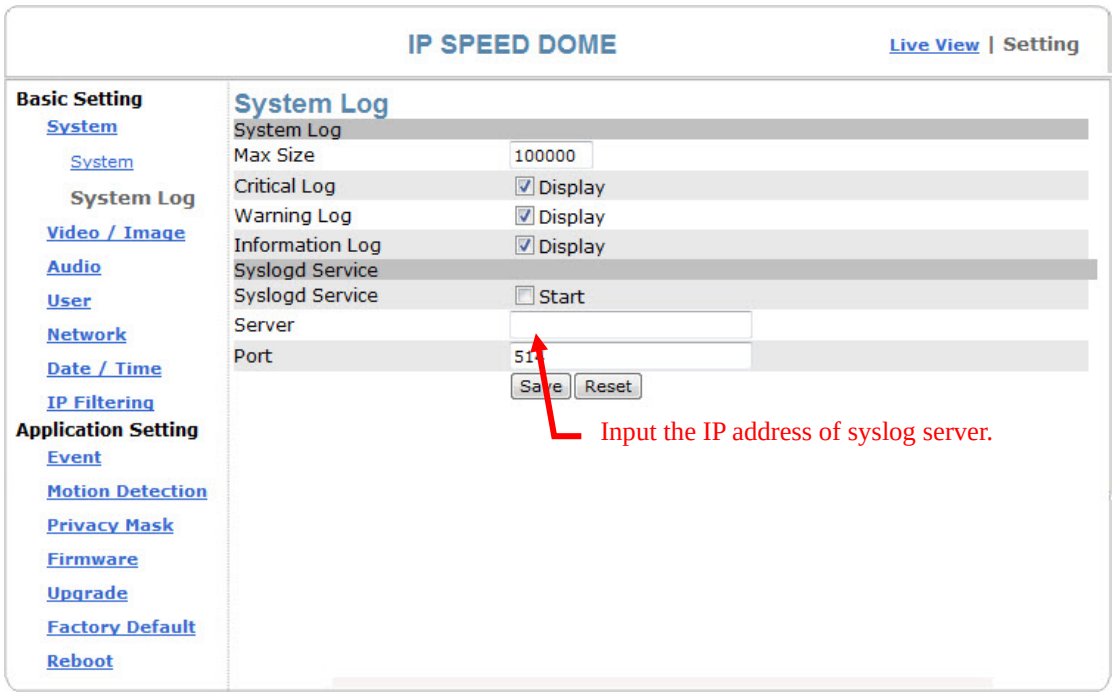
  Current Viewers: The number of viewers who are currently accessing the video stream.

- **Basic Setting > System > System Log**

  The administrator can view all login information of this camera, including boot record, video streaming mode, login IP, changes, and the date/time information. You can copy the entries to a Word document and save them manually. Please note that all information is deleted when you turn off the machine.

Basic Setting > System > System Log

This function can send log file to syslog server to monitor the situation of IP cam. You can download free software of syslog server from internet.



■ **Basic Setting > System > System > System Log > System Log**

Max Size: The numbers that log exist, the default is 100000.

Critical Log: The most important log file.

Warning Log: The medium level of log file.

Information Log: The general log file.

■ **Basic Setting > System > System > System Log >Syslogd Service**

Syslogd Service: click start to send log to server.

Server: The IP address of syslog server.

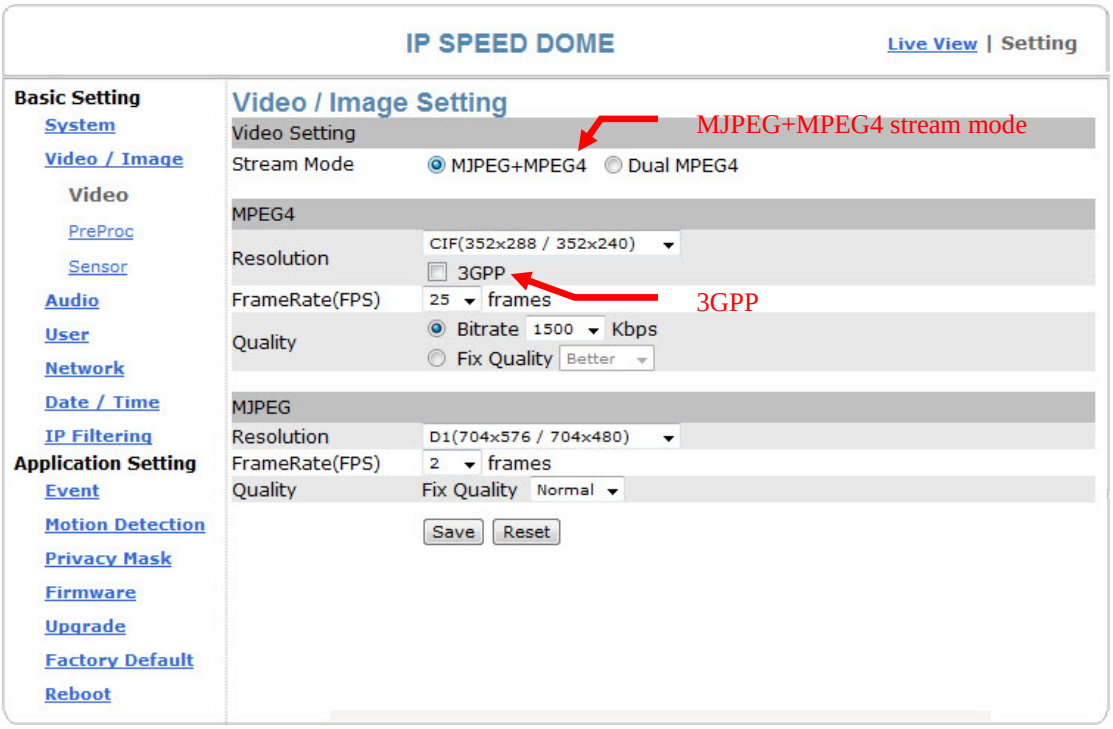
Port: Set the port number.

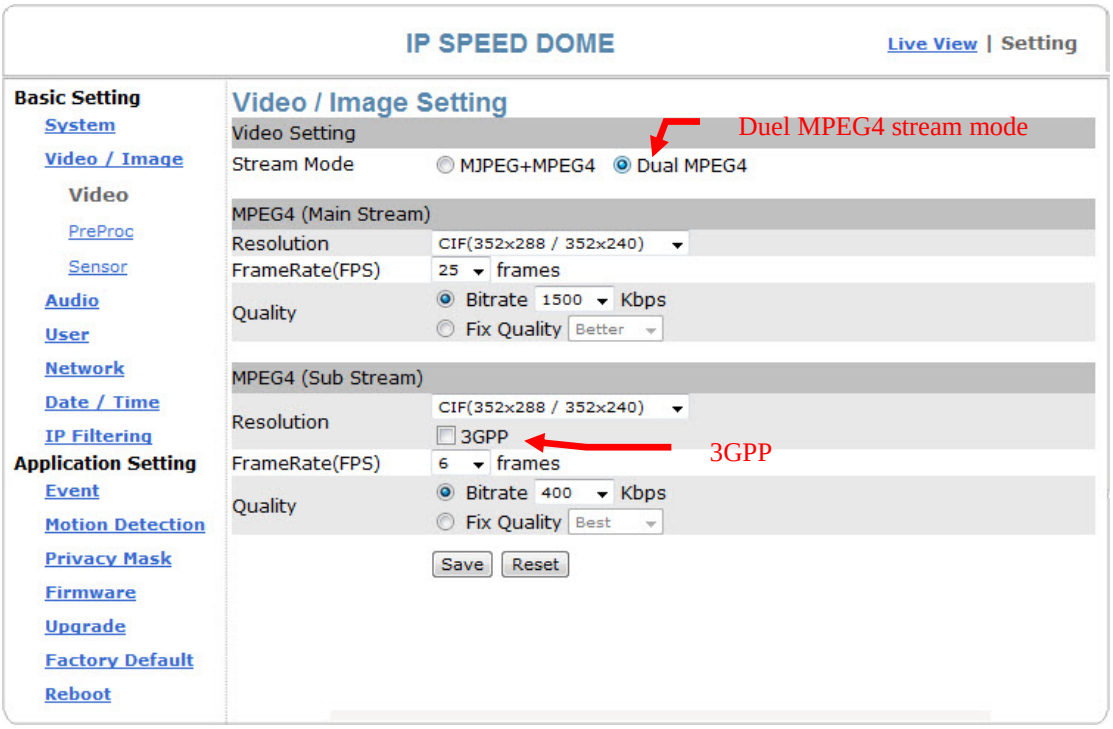
Basic Setting >Video/Image

Basic Setting > Video / Image > Video

■ **Basic Setting > Video / Image > Video >Video Setting**

You can select MPEG4 or MJPEG as the video format. It is recommended to select MPEG4 for real-time browsing to optimize the bandwidth. MJPEG is a good choice for the best resolution when video recording is required for collection of evidence.





■ **Basic Setting > Video / Image > Video Image > 3GPP**

To view the camera image using a 3G cellular phone, click Enable to enable the 3GPP mode. (Note: When the 3GPP mode has been activated, all relevant parameters are set automatically and cannot be changed. This is for the sake of compatibility).

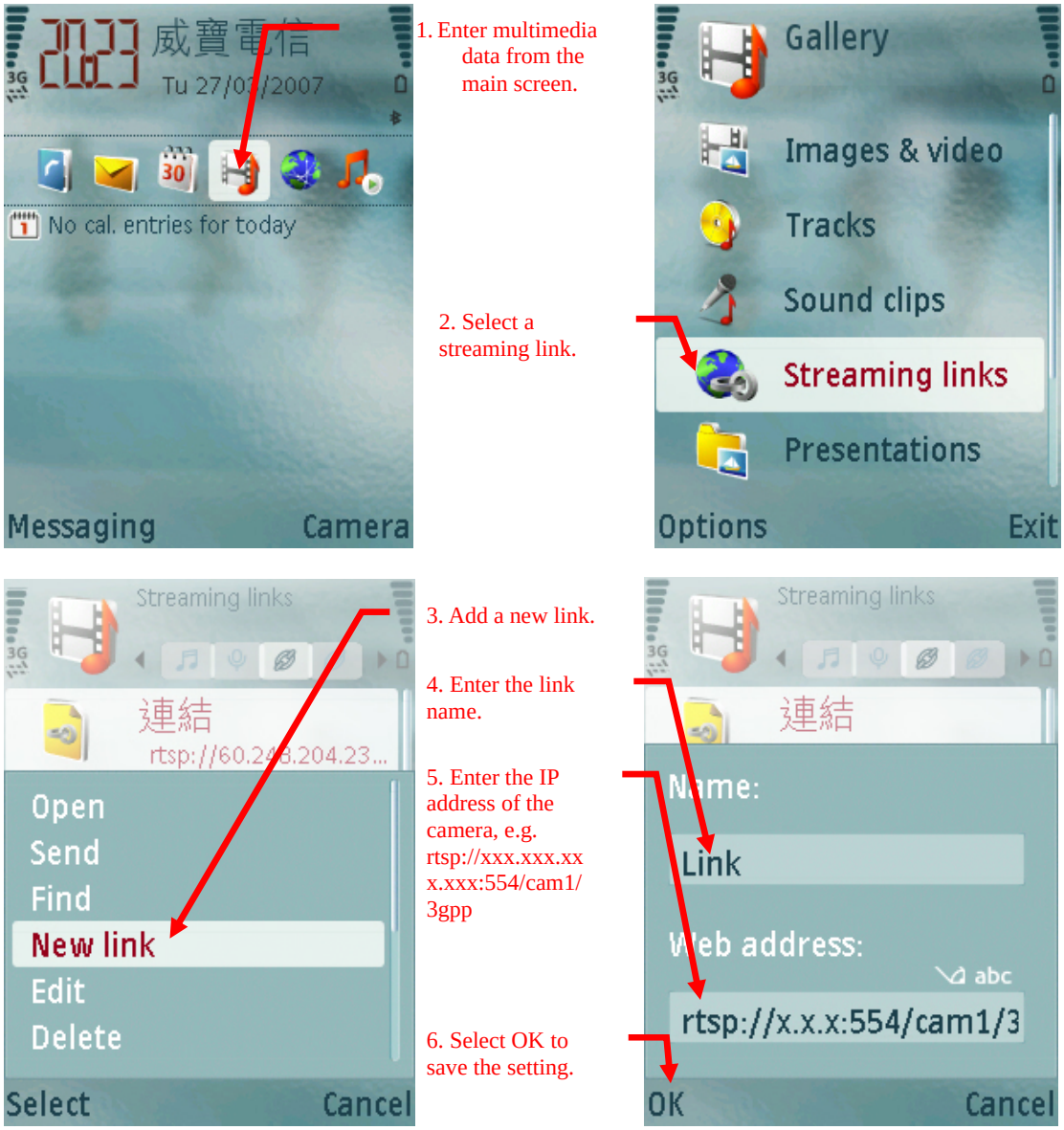
To use the 3GPP function, the following requirements must be met. Contact your telecom company to learn more about the connection conditions):

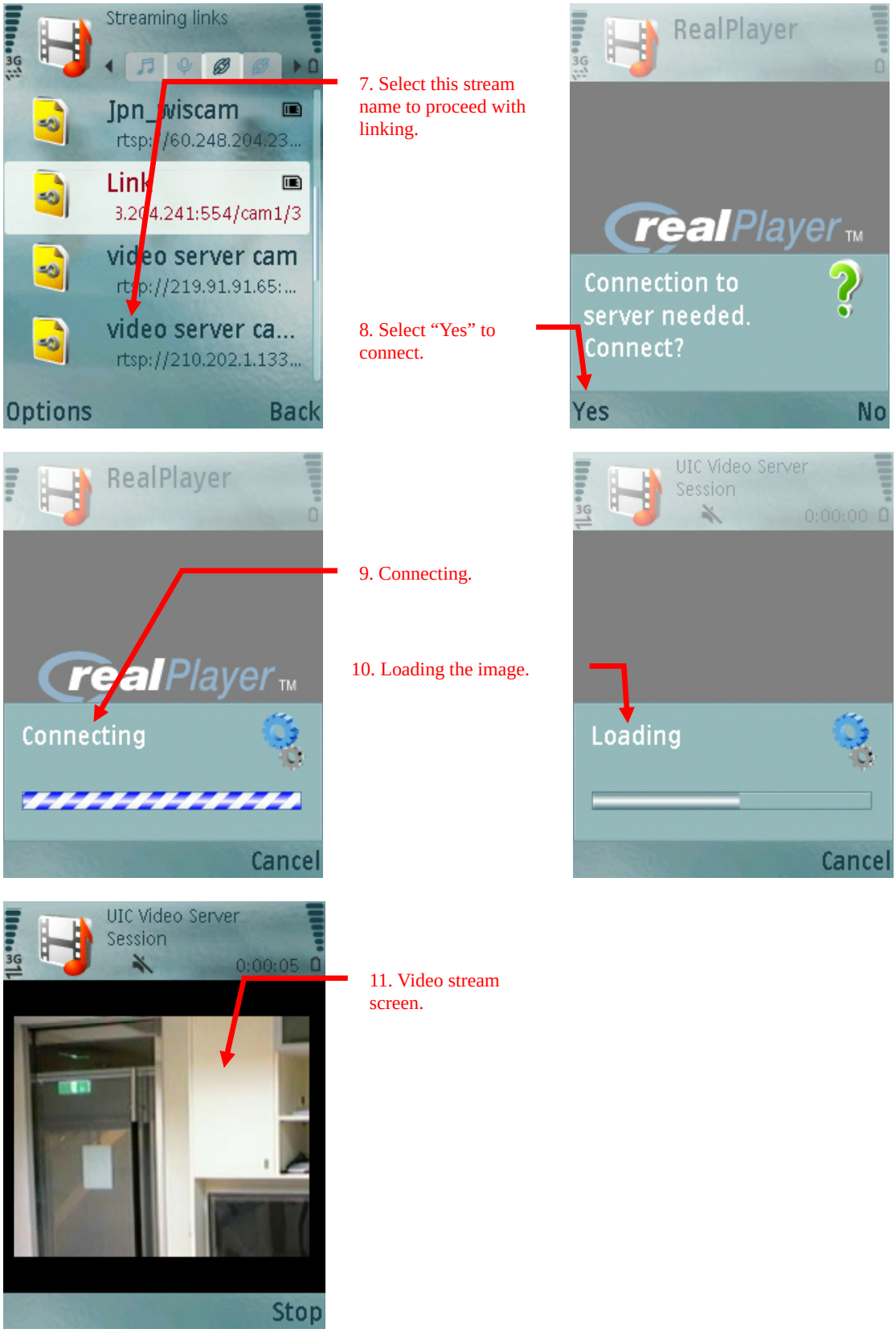
1. 3G phone: Your cellular phone functions properly and supports 3G service.

The compatible cellular phones that have passed our test are: Nokia 6630, Nokia N73, Wibo WinII, Nokia E61, Nokia N70, Nokia N93

2. 3G phone number is available.
3. The 3G wireless networking service is available.
4. The camera has a fixed IP address.
5. The 3GPP mode is activated.

Ex: Nokia N71. Follow these steps to set up your 3G viewing function





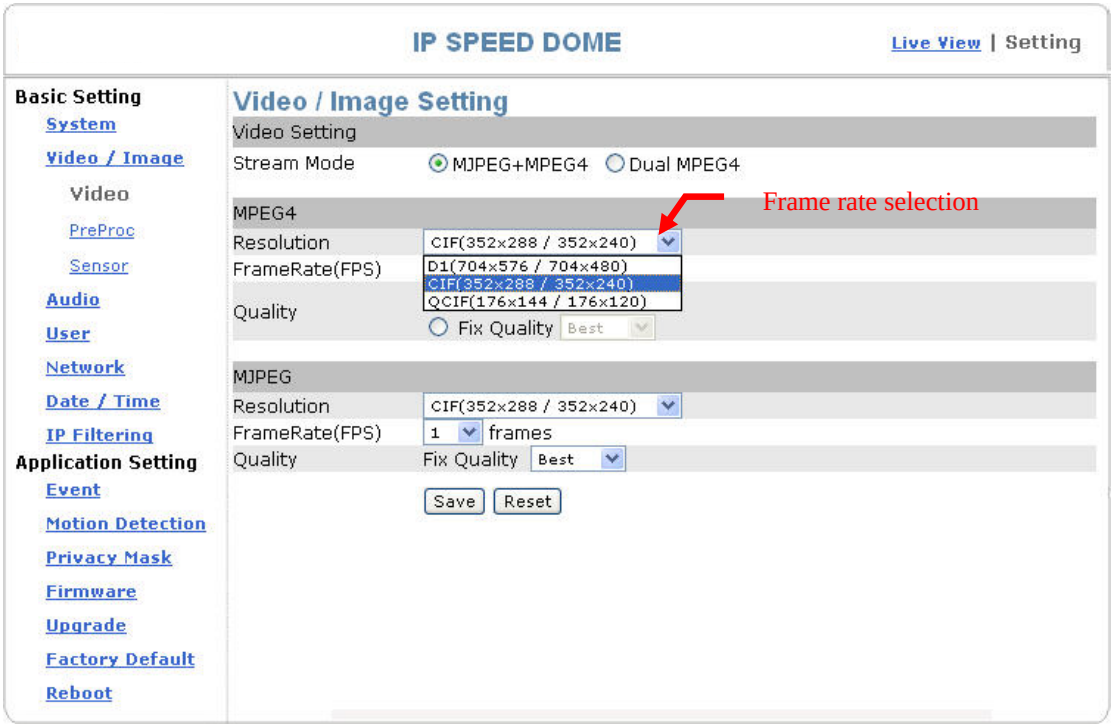
■ **Basic Setting > Video / Image > Video Image >Video Resolution**

Generally speaking, selection of resolution is dependent on the bandwidth of the network you are using. This product offers different selections for video/audio settings. However, to ensure undisrupted image transmission, you need a higher

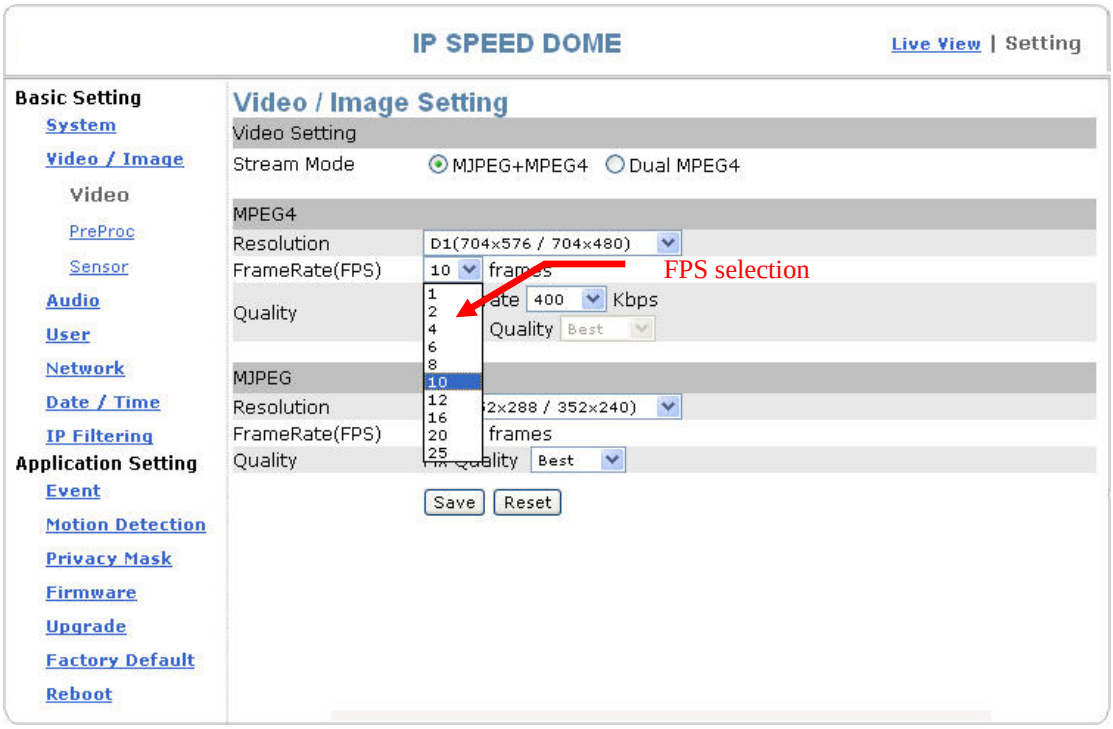
uploading bandwidth. Generally, it is recommended to use CIF resolution for normal bandwidth. To meet other requirements, refer to Attachment B for more information.

The product offers 4 image resolutions (PAL/NTSC):

1. D1 (704x576 / 704x480)
2. CIF (352x288 / 352x240)
3. QCIF (176x144 / 176x120)



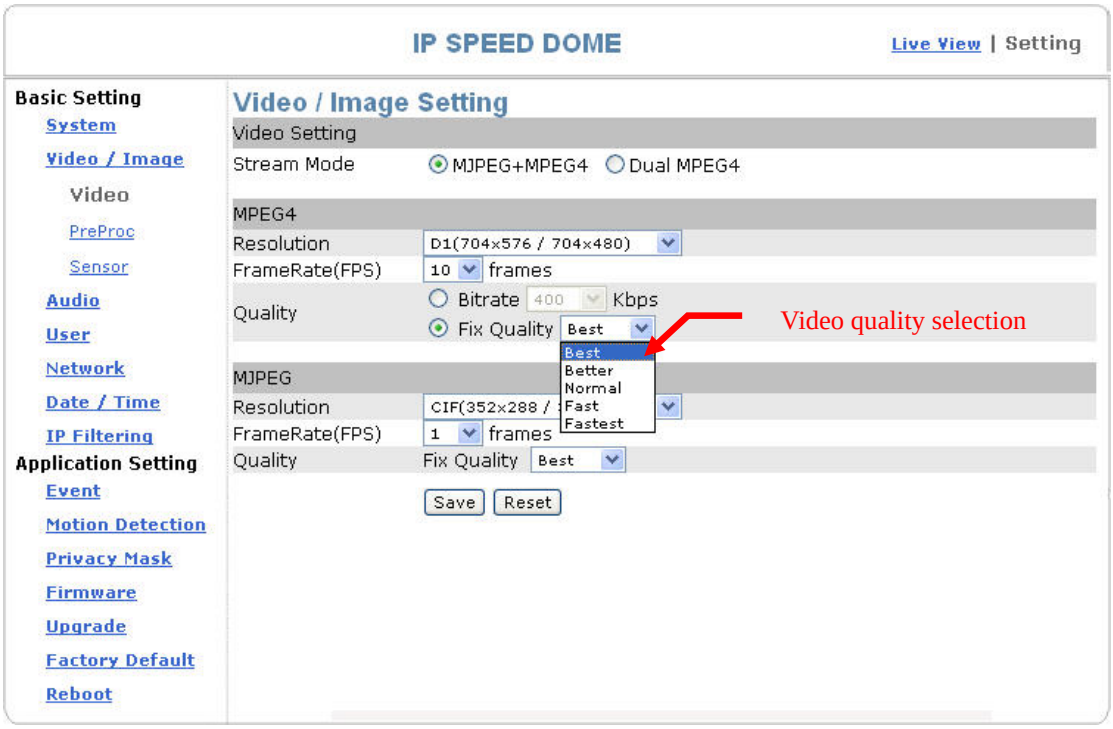
■ **Basic Setting > Video / Image > Video Image >Frame per Second (FPS):**
With NTSC, you can choose 1, 2, 3, 4, 5, 6, 7, 10, 15 or 30 for video resolution
With PAL, you can choose 1, 2, 3, 4, 5, 6, 12 or 25 for video resolution.



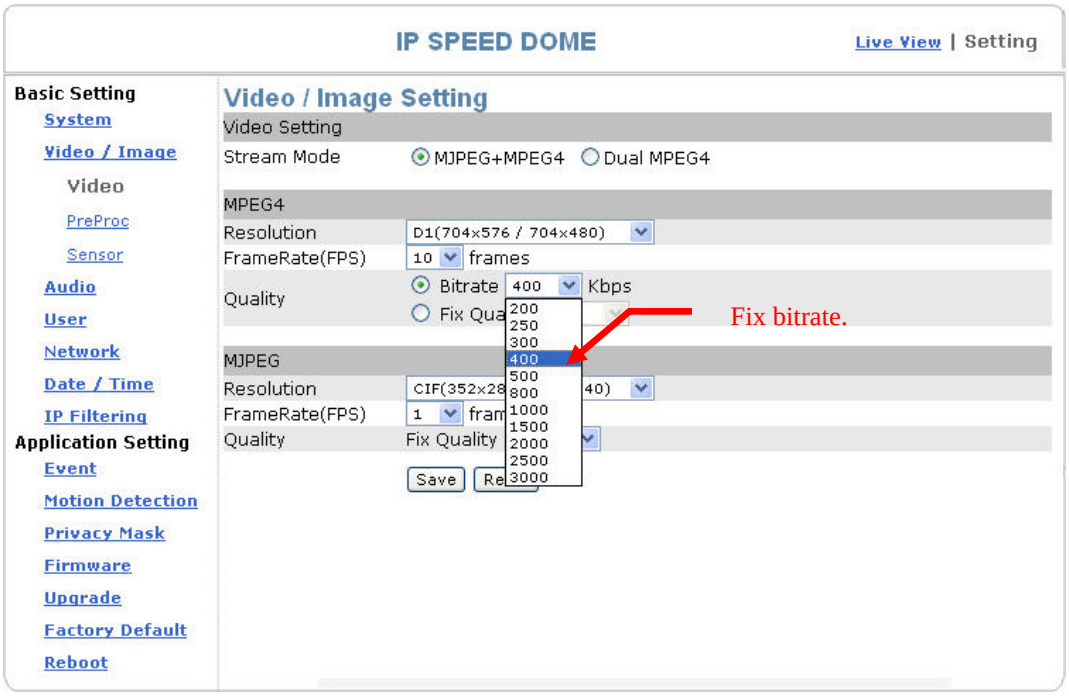
■ **Basic Setting > Video / Image > Video Image >Video Quality**

You can select Fix Quality (resolution priority) or Fix Bitrate (fluency priority) at the same bandwidth.

Five options are available for your choice: Best, Better, Normal, Fast, and fastest.



15 transmission speeds ranging from 50K to 3M are available in the Fix Bitrate mode. The higher the transmission speed, the better the quality and fluency.



Basic Setting > Video / Image >PreProc

- **Basic Setting > Video / Image > PreProc > PreProc Setting**

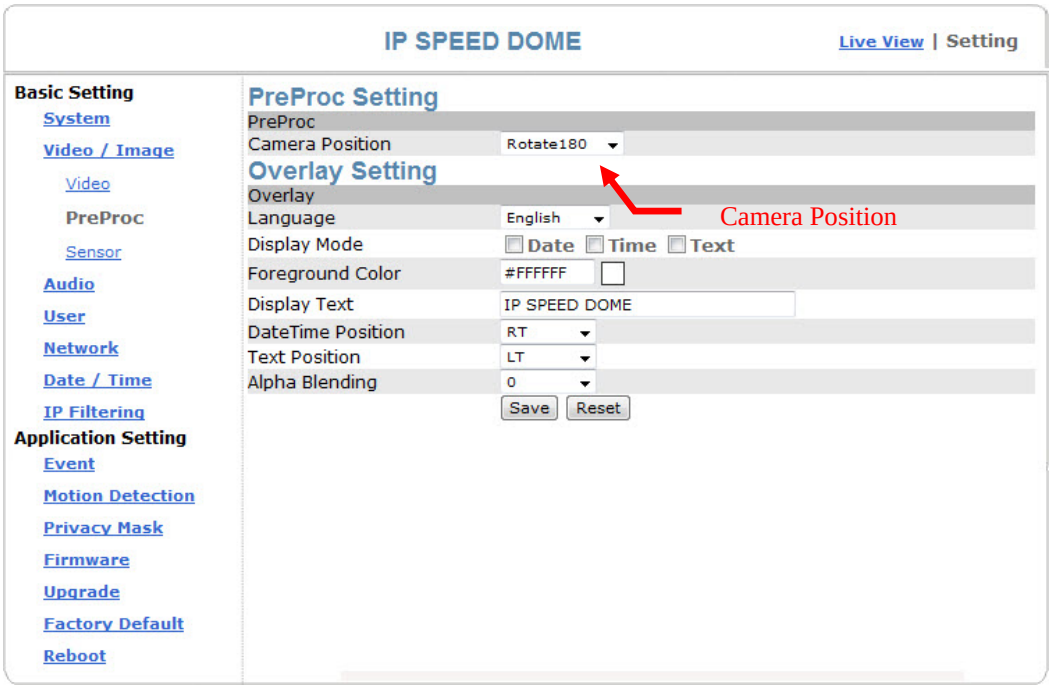
  Camera position: Sets the position of camera on the screen—up, down, left and right

  Desktop: Select this option when the product is in normal deployment.

  Flip: Select this option when the product is mounted on the ceiling.

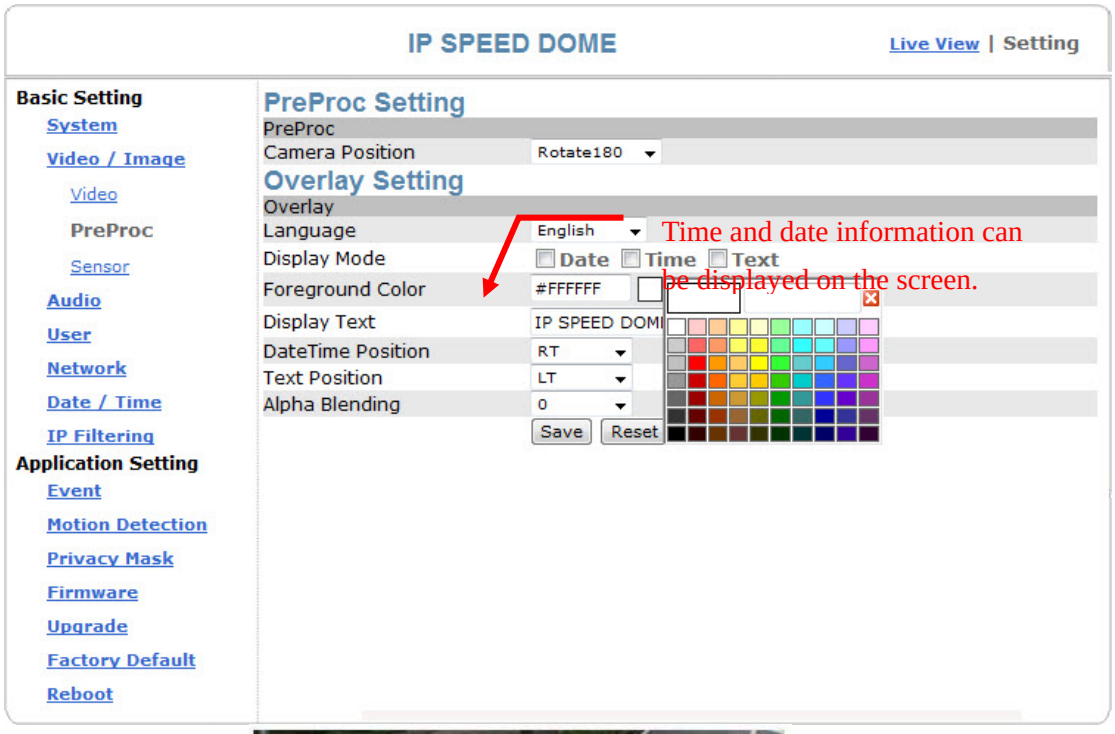
  Mirror: Select this option when the product is in normal deployment, but from the reflection of a mirror.

  Rotate 180°: Select this option when the product is installed on the ceiling and from the reflection of a mirror.



■ **Basic Setting > Video / Image > PreProc >Overlay Setting**

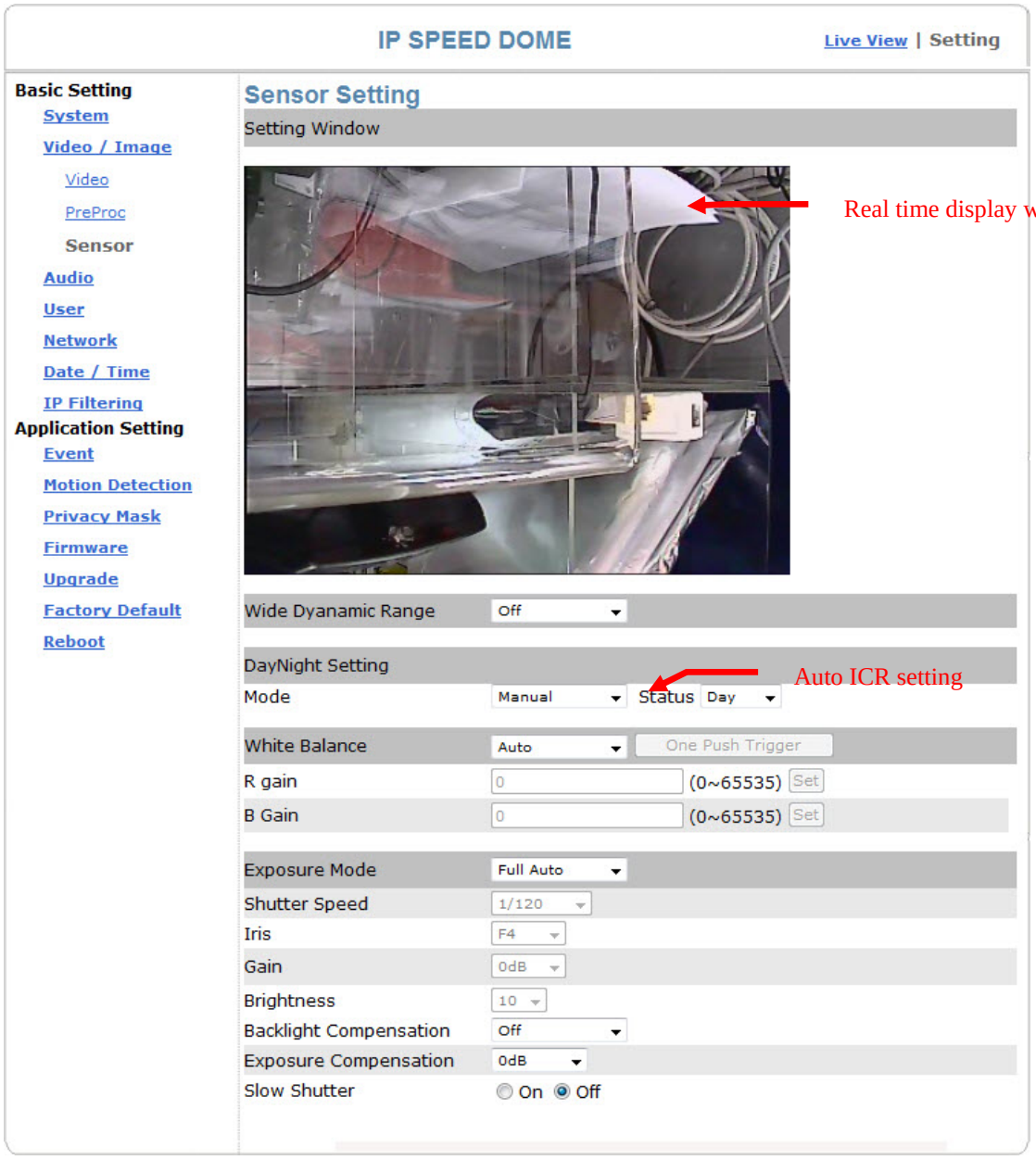
Language: Choice what kind of language you want to display.
Display mode: You can select to display the date, time and text or not.
Foreground color: Selects the color for date, time and tax display. Click on the color block to bring out the color palette. Move the pointer to the desired color and click on it.
Display text: Inputs the text you wish to display on the screen, e.g. Lobby IP Cam.
Date/time position: Selects the location where the date and time are displayed on the screen—any of the four corners.
Text position: Selects the location where text is displayed on the screen—any of the four corners.
Alpha Blending: Transparency available options are 0%, 50% and100%.
Please don't forget to press the Save button to save and apply the settings.



Basic Setting > Video / Image > Sensor

Adjust brightness, contrast and color. Displays date, camera ID and relevant information on the video.

When the setting on this page is changed, a new image will immediately appear on the real-time display window.

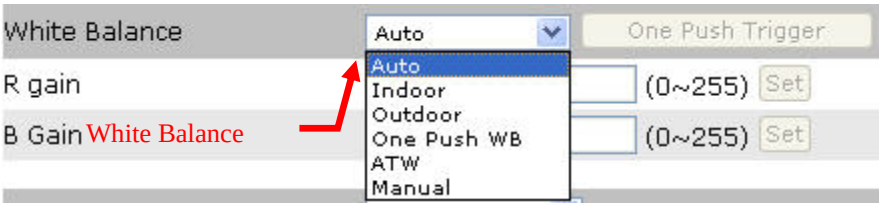


Basic Setting > Video / Image > Sensor > Wide Dynamic Range (for ALC-9552 Model Only)

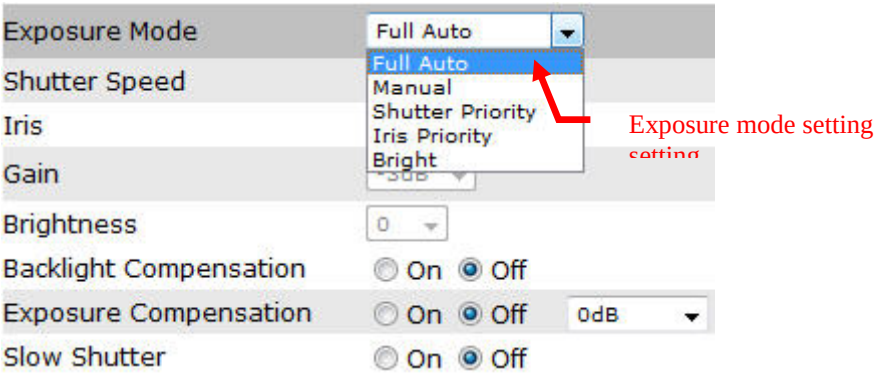
The **Wide Dynamic Range** (WDR) function of a camera is intended to provide clear images even under back light circumstances where intensity of illumination can vary excessively, namely when there are both very bright and very dark areas simultaneously in the field of view of the camera. WDR enables the capture and display of both bright areas and dark areas in the same frame, in a way that there are details in both areas.

Basic Setting > Video / Image > Sensor > DayNight Setting
When the ambient illumination becomes dim, the ICR changes the color filter to the monochrome mode via a micro motor in front of the lens. The Auto ICR is Auto by default. Select Manual if manual setting is required.
Auto: The camera will judge the darkness to switch automatically into Day or Night mode.
Manual: Set the Day or Night mode by Manual.
External: Activate Day or Night Mode using external lighting sensor. Connect the sensor with IO input of the camera. Set up the activation in the "Event" function. Please refer to Application / Event / Event for more information.

Basic Setting > Video / Image > Sensor > White balance
The white balance setting can adjust the difference of white color in natural or artificial light. Select Auto if you are not familiar with this setting.



Basic Setting > Video / Image > Camera Advance Setting > Exposure Mode
The exposure mode defines how the computer processes the natural light source. 5 modes are available: full auto, manual, shutter priority, iris priority, and bright. The clearness of the image depends on the exposure (i.e. the light required for CCD to acquire clear image), which is determined by the shutter speed and diaphragm aperture. If you are not familiar with the setting, select Full Auto.

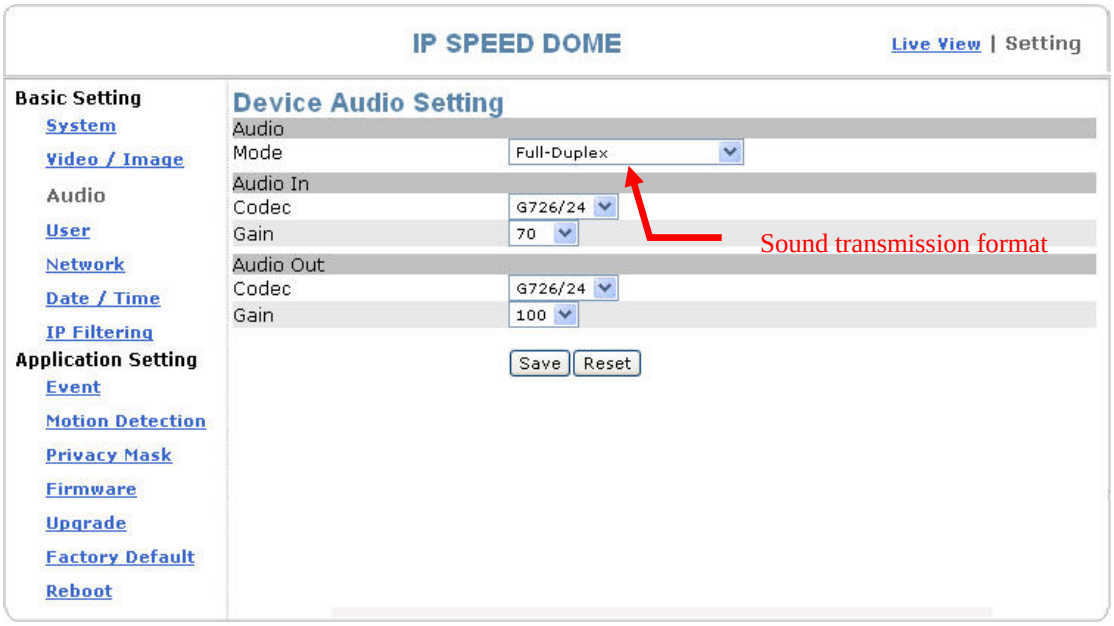


Basic Setting > Audio (Sound)

Basic Setting > Audio > Audio (sound setting)

- **Basic Setting > Audio > Audio > Mode**
  Audio mode: Full duplex, half duplex, simplex microphone only, simplex amplifier only, and audio off.
  Full duplex: Allows using a microphone and amplifier at the same time, or turning them off.

Half duplex: Allows using a microphone or amplifier by manual switch.
Simplex microphone only: Allows using the microphone only.
Simplex amplifier only: Allows using the speaker only.
Audio off: Turns audio off; i.e. both the microphone and speaker are off.



Audio input: Codec is G.726/24bits format.
Audio output: Codec is G.726/24bits format.
G726/24: Uses G.726 24Kbps for audio encryption/decryption.

Gain: Adjust the volume of the audio.

Basic Setting > User(User)

The administration of the camera can set up access privileges by administrator, operator, and viewer to ensure the security and control of the camera. The access privileges and setting steps are described as below.

Basic Setting > User > User List (access privilege list)

The access privileges of the administrator, operator, and viewer are listed as follows. The administrator has the right to define the privilege for each user depending on requirements.

User		Administrator	Operator	Viewer
Live View		v	v	v
System Setting		v	v	
Video Setting		v	v	
	3GPP	v	v	
Audio Setting		v	v	
Date / Time Setting		v		
User Setting		root		
Network Setting		v		

	Wireless	v		
	DDNS setting	v		
	PPPoE setting	v		
	Streaming	v		
	UPnP	v		
	SMTP	v		
	SAMBA	v		
	Notification	v		
IP Filter setting		v		
Event Setting		v	v	
	schedule setting	v	v	
	event server	v	v	
	trigger setting	v	v	
Motion Setting		v	v	
Firmware Upgrade		root		
Factory default		v		
Reboot Setting		v		
PTZ Control		v		User with PTZ privilege

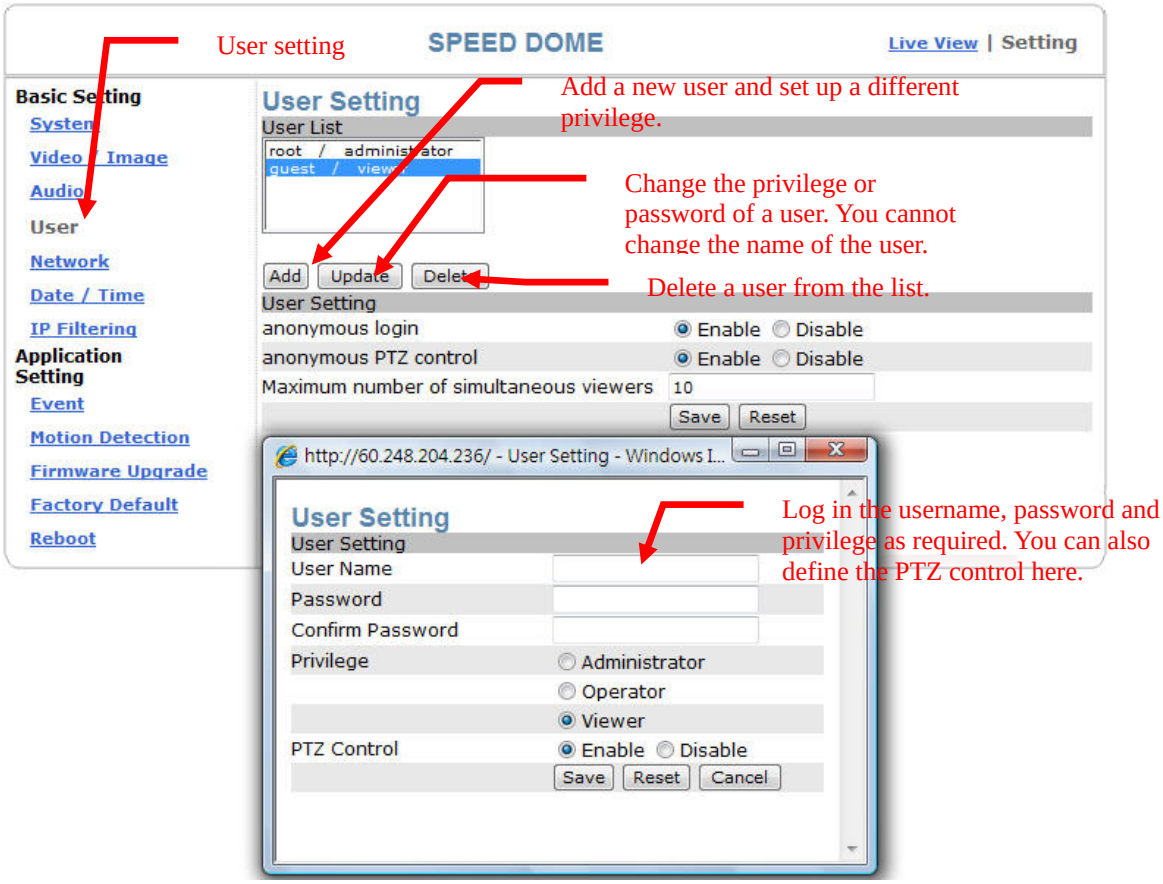
Steps: Click Add (to add a new user), Update (to change the privilege or password of a user on the list), or Delete (to delete a user from the list) and complete required fields. Then Click "Save" to complete the setting.

Options:

Add: Add a new user and set up a different privilege.

Update: Change the privilege or password of a user. You cannot change the name of the user.

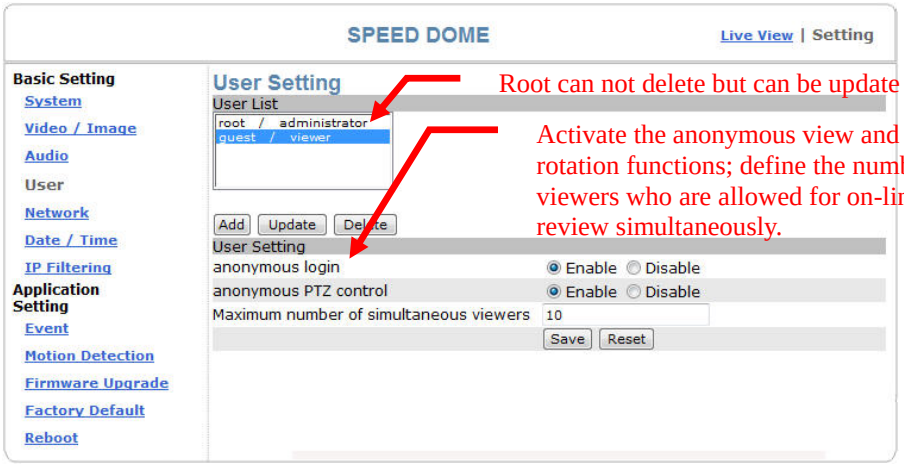
Delete: Delete a user from the list.



Basic Setting > User > User Setting (privilege setting)

For special business situations, this product allows you to log in to browse without the need of keying in your username and password. For this purpose, you need to check “Enable” at Anonymous Login. To allow the user to control the camera, you need to check “Enable” at Anonymous PTZ Control. However, “Disable” for both options is recommended for the sake of security. Depending on the bandwidth and requirements, a limit up to 10 viewers who are allowed to view the camera simultaneously can be defined.

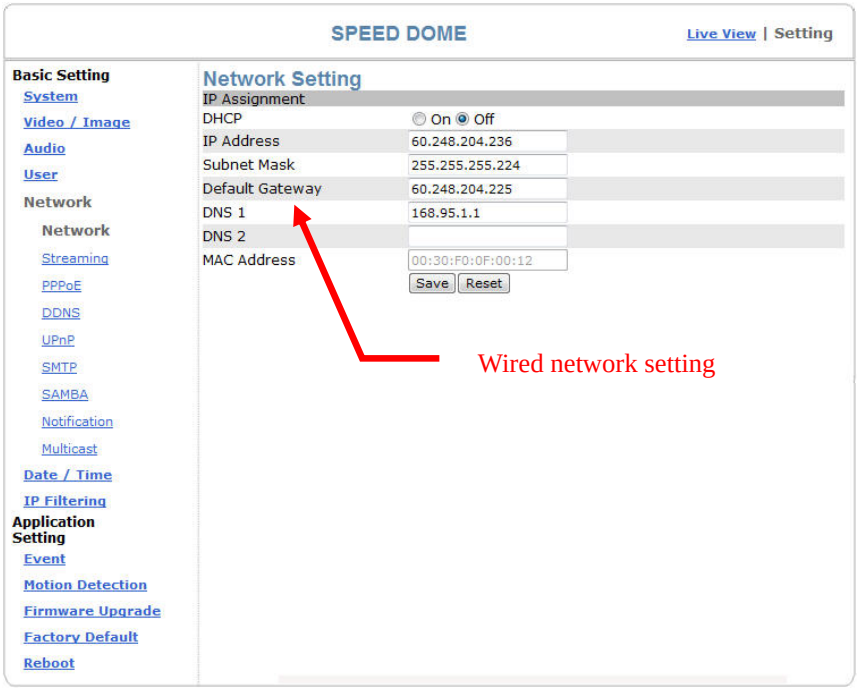
Note: The initial login name and password of this product is “root”. This “root” user name cannot be deleted but the password can be changed. For security purposes, we recommend that you change and remember the password after the first login. If you forget the new password, the only way is to use the hardware Reset key to restore the Factory Default.



Basic Setting > Network (Network Settings)

Basic Setting > Network > Network (wired network setting page)

■ **Basic Setting > Network > Network > IP Assignment**



DHCP setting:

DHCP (Dynamic Host Configuration Protocol) is a protocol that enables automatic assignment of TCP/IP information to the client. Each DHCP client connects to the DHCP server to access its network setting information, including IP address, gateway, and DNS server.

The IP address of the camera is 192.168.0.20 by default when DHCP is "OFF". When you select "DHCP ON" and access the DHCP network environment, the camera will automatically send a DHCP packet to request an IP address. This IP address is assigned automatically from the DHCP server on the network. No additional settings are required for this page unless you need to change the network configuration. The

DHCP status of the camera is "OFF" by default.

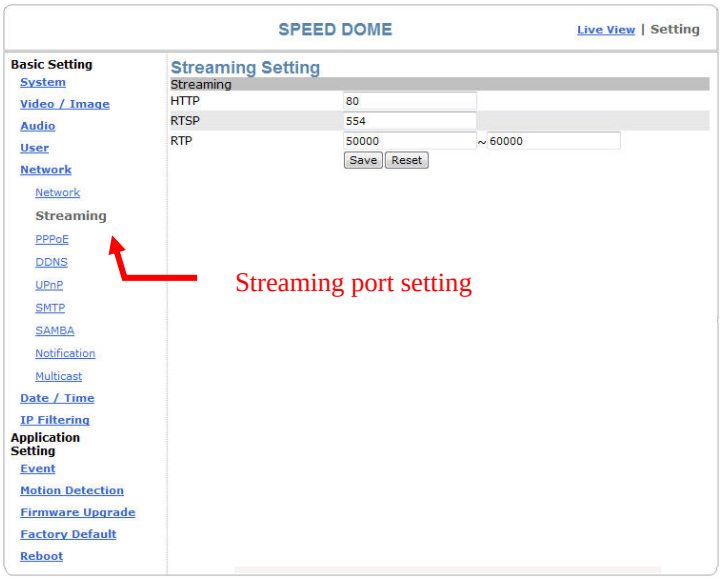
Other settings:
For IP address, Subnet mask, Default gateway, DNS 1, and DNS 2, the DHCP server will assign these values automatically when DHCP is in "ON" status; otherwise, you need to key in the values manually.

Note: Where no IP address is assigned from the DHCP server, the system will set the Link-Local Address automatically.

Basic Setting > Network > Streaming (streaming Setting)

Setting of the video streaming port (HTTP and factory default are recommended)

1. HTTP: Port 80 can pass through most firewalls. Video streams are transmitted through HTTP Port (80 by default) to ensure passage through firewalls.
2. RTSP: Port 554 uses a fixed port (i.e. TCP) or can be defined by users to ensure reliable data transmission. Video streams are transmitted through RTSP Port (554 by default) to avoid video fragment or mosaics due to poor transmission quality.
3. RTP: Port 50000 to 60000 are UDP ports and can be defined by users. They provide the fastest but also most unreliable transmission service. Video streams are transmitted through UDP Port (50000~60000 by default) to ensure the fastest image transmission. However, video fragment or mosaics may occur due to poor transmission quality.



Basic Setting > Network > PPPoE (dial-up networking setting)

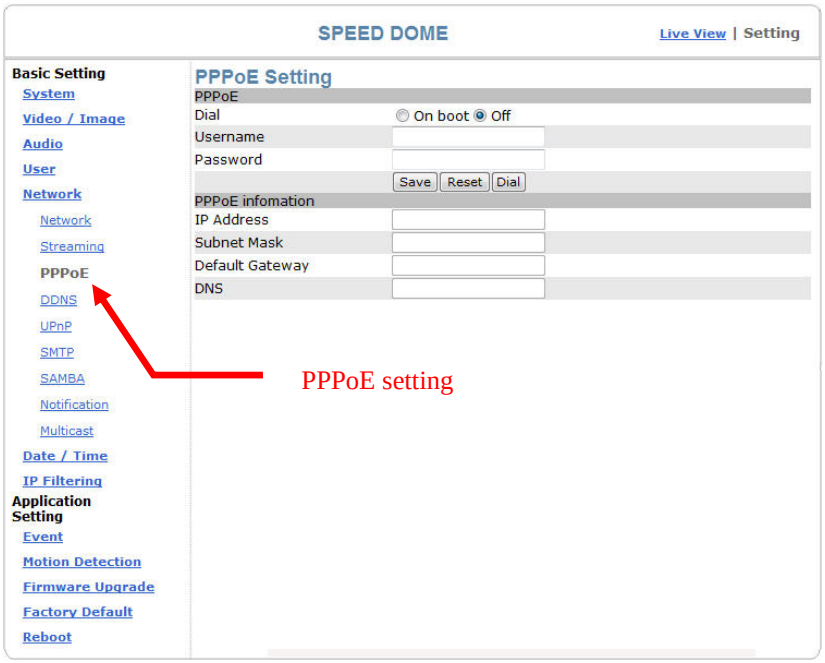
PPPoE: Point-to-Point Protocol over Ethernet is a protocol that supports access to a high-speed wideband network using a PC and a wideband modem (such as xDSL, Cable, Wireless modem). The user need only to equip the PC with an Ethernet card and apply to an ISP (such as HiNet) and an ADSL provider (such as Chunghwa Telecom) for ADSL service to roam the Internet through ordinary twisted copper wires.

PPPoE: Point to Point Protocol over Ethernet is applicable to networking via a xDSL

or cable modem. PPPoE setting must be executed in the LAN environment for your PC to connect to ADSL. Follow the steps below to complete the setting:

1. Dial: You can select whether or not to dial when you boot the machine.
2. Use DHCP or fixed IP for connection to the LAN environment.
3. Key in the IP address of the camera and enter "PPPoE Setting" following the route Setting ➔ Basic Setting ➔ Network➔ PPPoE.
4. Key in the xDSL "Username" and "Password" acquired from your ISP. Click Save to confirm the setting.
5. Where the ADSL modem and the camera is connected via a switch-hub, you can press “Reboot” or restart the machine manually to try PPPoE dialing when the setting of the camera has been completed.
6. A different IP address is obtained after each dial-up network connection. You can get the new IP address from Setting ➔ Basic Settings ➔ System. If you want to know the new IP address anytime, you must enter Setting ➔ Basic Settings ➔ Notification to set some settings. There are three ways to get information: 1. SMTP 2. FTP 3. HTTP. For details, refer to the Notification Setup Menu.

Note: You can use the DDNS function to access the camera. Refer to the “DDNS Setting” page for more information.



- **Basic Setting > Network > PPPoE > PPPoE**
  Dial: You can select whether or not to dial when you boot the machine (On Boot or Off).
  Username: Enter the username provided by your ISP.
  Password: Enter the password.
- **Basic Setting > Network > PPPoE > PPPoE Information**
  IP Address: The IP address acquired when dialing has been executed

successfully.
Subnet Mask: The subnet mask information acquired when dialing has been executed successfully.
Default Gateway: The gateway information acquired when dialing has been executed successfully.
DNS: The ISP domain name acquired when dialing has been executed successfully.

Basic Setting > Network > DDNS (Dynamic Domain Name Server Setting)

The IP address (Ex. 210.168.0.22) is like a telephone number, while the website address is like a name in an address book. The DDNS allows the user to access the website by entering the name of the website without memorizing a bunch of cold numbers.

When you apply for an Internet service, you will have at least one IP address from your ISP that is either fixed or dynamic. Most of the ADSL service providers will give you a dynamic IP for ADSL environments, which means your IP address will constantly change each time you connect to the Internet. As a result, users from WAN environments will have much difficulty finding the correct IP address. The DDNS (Dynamic DNS service) is created for exactly this kind of moment. By updating your WAN IP address each time you connect to the Internet, the DDNS helps you locate your website and access your website easily. You can find a lot of free DDNS service providers on the Internet, such as www.no-ip.com and www.DynDNS.org.

Some gateway-routers can directly communicate with DDNS. In this case, you may directly enter your DDNS account on the setting page in the Internet router, and then the router will update your WAN IP status whenever it is changed and report to the DDNS. If your router does not support direct communication with the DDNS, you can download a small application program on the DDNS service page to help you update your WAN IP.

Item Description:

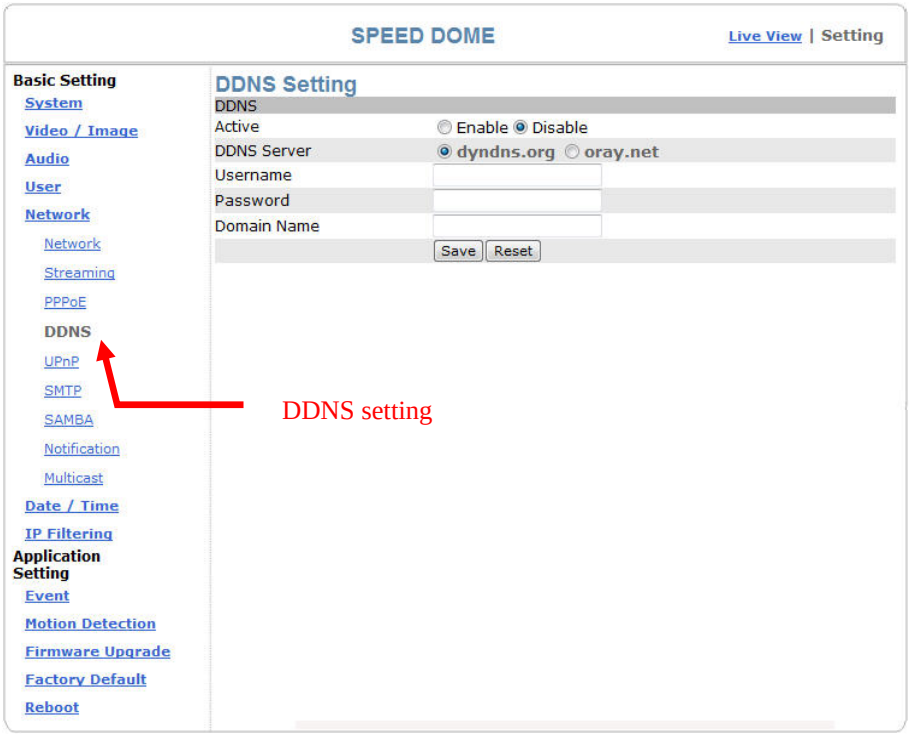
Active: enables/disables DDNS

DDNS Server: currently we only support http://dyndns.org. This is a free domain name server provided by DynDNS. You may log on this website for relevant information and apply for free domain names.

Username: your account for the domain name you applied for

Password: your password for the domain name you applied for

Domain Name: the domain name you applied for.



Basic Setting > Network > UPnP (Universal Plug and Play)

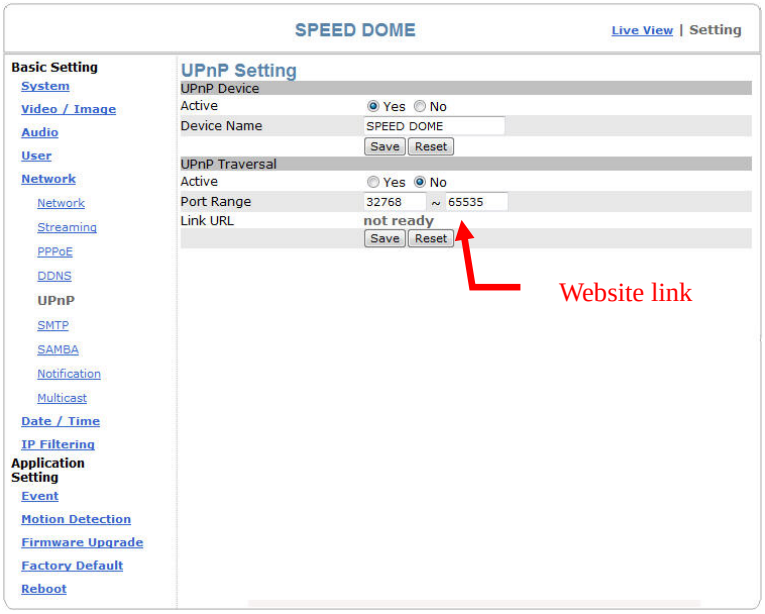
If you connect your camera to a router, IP allocator, or wireless AP, your camera will possibly be blocked by the NAT and can't be located on the Internet. To penetrate the firewall, activate the supportive item- UPnP. The Link URL shows the external IP address and the port of the router. Enter the IP address in the Internet Explorer to penetrate the NAT.

- **Basic Setting > Network > UPnP > UPnP Device**

  Active: yes (enable)/no (disable)
  Device Name: the name of the UPnP device

- **Basic Setting > Network > UPnP > UPnP Traversal**

  Active: yes (enable)/no (disable)
  Port Range: the range of the usable ports, from 32768 to 65535 as default
  Link URL location: After the network camera penetrates the firewall successfully, the actual external IP address and port will be shown.
  Click "Save" to confirm when you finish.

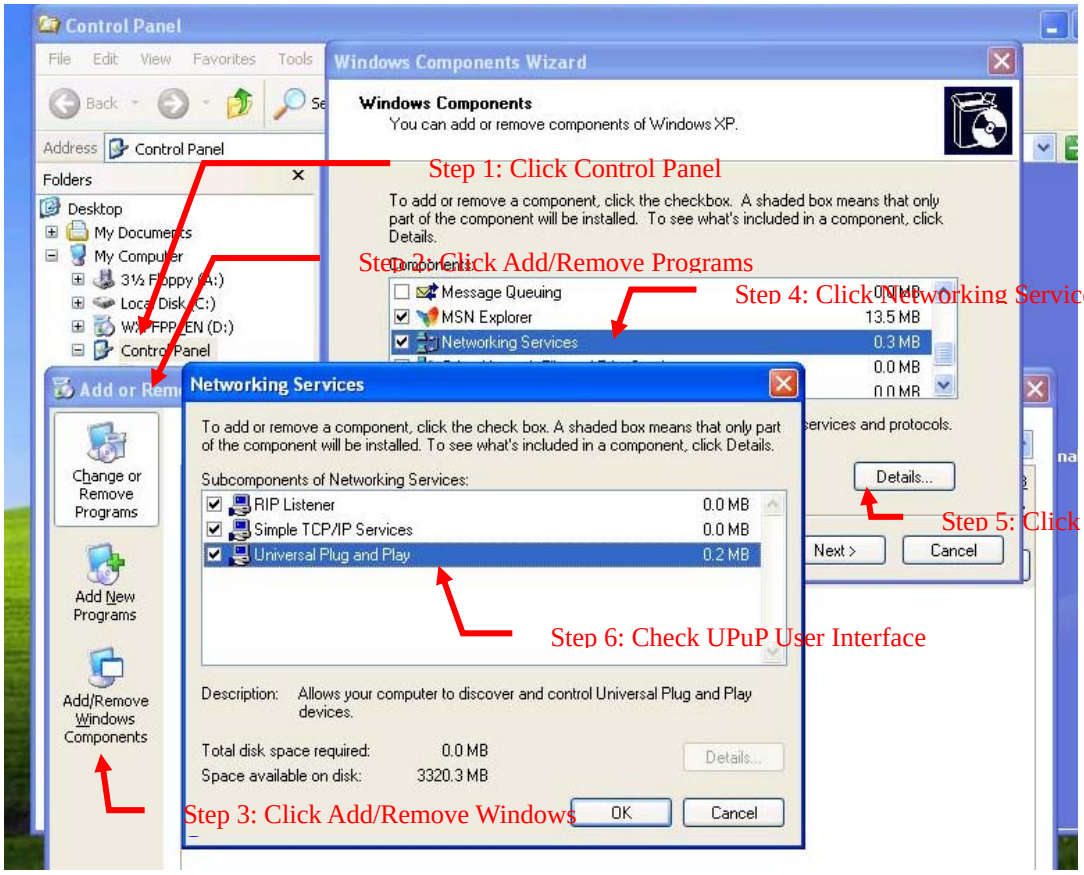


UPnP setting

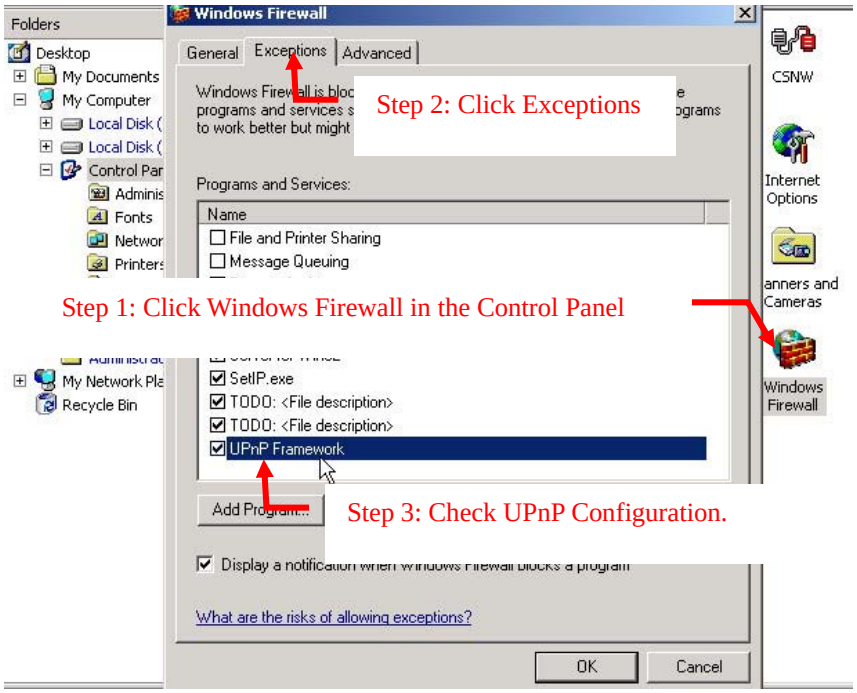
To activate the UPnP function in Windows OS:

Ex: Windows XP:

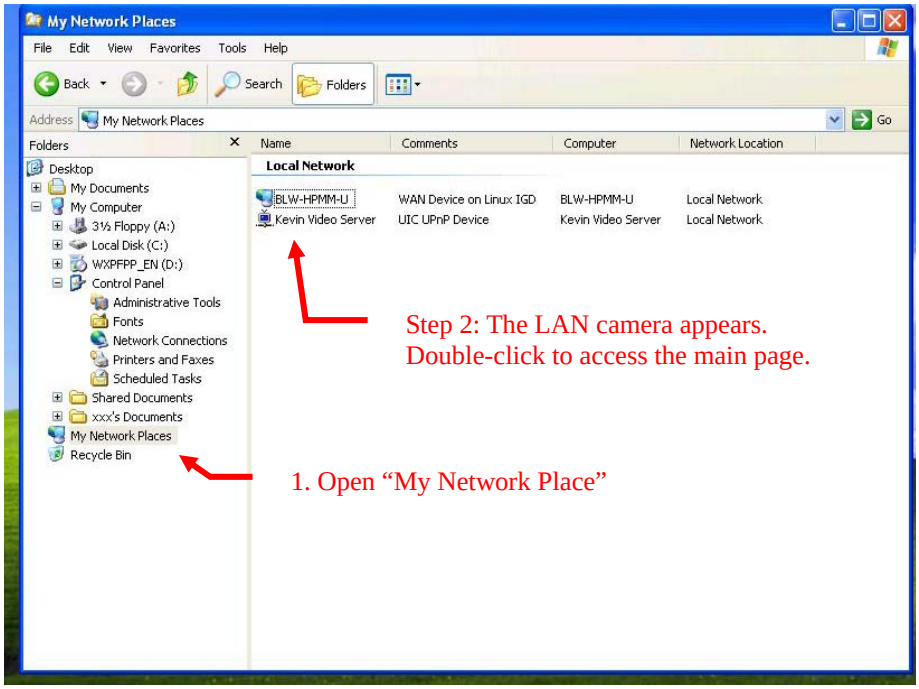
1. Windows component installation.


Control Panel
File Edit View Favorites Tools
Back
Address Control Panel
Folders
Desktop
My Documents
My Computer
Control Panel
Windows Components Wizard
Windows Components
You can add or remove components of Windows XP.
To add or remove a component, click the checkbox. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details.
Components:
Message Queuing
MSN Explorer 13.5 MB
Networking Services 0.3 MB
Details...
Next >
Cancel
Step 1: Click Control Panel
Step 2: Click Add/Remove Programs
Step 4: Click Networking Services
Step 5: Click Detail
Networking Services
To add or remove a component, click the check box. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details.
Subcomponents of Networking Services:
RIP Listener 0.0 MB
Simple TCP/IP Services 0.0 MB
Universal Plug and Play 0.2 MB
Description: Allows your computer to discover and control Universal Plug and Play devices.
Total disk space required: 0.0 MB
Space available on disk: 3320.3 MB
Details...
OK
Cancel
Step 6: Check UPuP User Interface
Change or Remove Programs
Add New Programs
Add/Remove Windows Components
Step 3: Click Add/Remove Windows

2. Open Windows firewall option



3. View the connection device using “My Network Place”



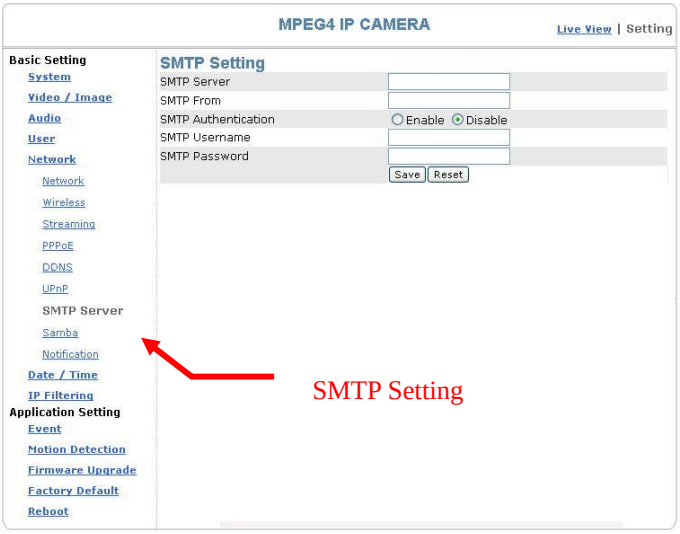
Basic Setting > Network > SMTP Server (mail server setting)

This camera is able to transmit images to a particular email address when a motion detection event occurs or a sensor is triggered. To use this function, a mail server setting for the camera is required.

Enter the following information in sequential order to complete the setting:

- SMTP server: the SMTP server IP address.
- SMTP From: the email of the sender, i.e. xxx@xxx.com
- SMTP Authentication: enables/disables

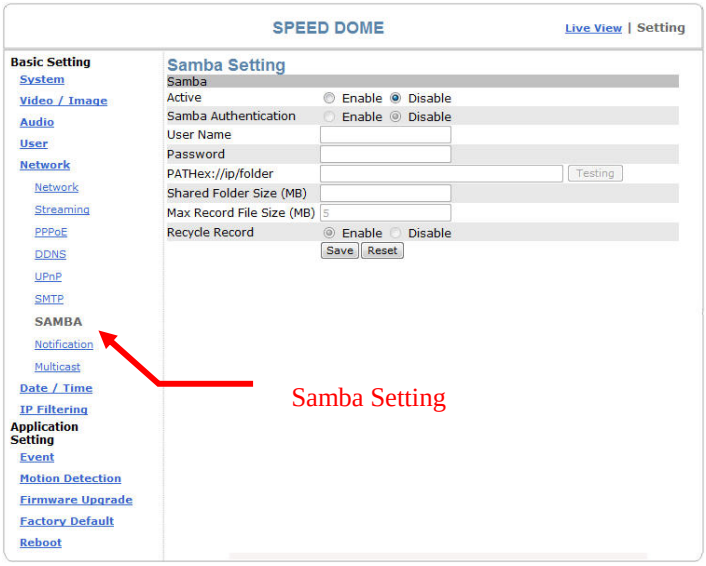
- User name: the SMTP server username.
- Password: the password of the SMTP server.
- Select “SAVE” to save the setting.



Basic Setting > Network > Samba

This camera is able to upload the snapshots to a specified shared folder when an event is triggered. To use this function, a Samba setting is required.

Options:
Active: Enable/Disable
Samba Authentication: Enable/Disable
Username: the username
Password: the password
Path: specify the IP address of the computer you want to share with and the file name, i.e. 192.168.0.X/xxx
Shared Folder Size (MB): the total capacity of the folder. Always remember to set the size of the folder to avoid exhaustion of disk capacity.
Max Record File Size (MB): the upper limit of the record file size. The size should not exceed the total capacity of the folder.



Basic Setting > Network > Notification Of IP Address Change (IP address change notice)

This setting is not necessary for a fixed IP. For a dynamic IP, you need to update the IP address every time you connect to the Internet to access the camera. This setting allows you to update the IP address by the automatic notification of IP address change. Choose one of the following three notice options to update the IP address:

1. Notification via SMTP mail server

■ **Basic Setting > Network > Notification of IP Address Change > SMTP Notification**

SMTP Notification: notification via SMTP mail server

SMTP SendTo: the recipient, i.e. xxx@xxx.com

SMTP Subject: mail subject

Select Save to complete and activate your settings.

2. Notification via FTP server

■ **Basic Setting > Network > Notification of IP Address Change > FTP Notification**

FTP Server: FTP Server name.

FTP Port: FTP port. The default setting is 21 (recommended).

FTP Upload path: the path to upload files.

FTP Login name: the name to log in the FTP.

FTP Login Password: the password to log in the FTP.

Select Save to complete and activate your settings.

3. Notification via HTTP server

■ **Basic Setting > Network > Notification of IP Address Change > HTTP Notification**

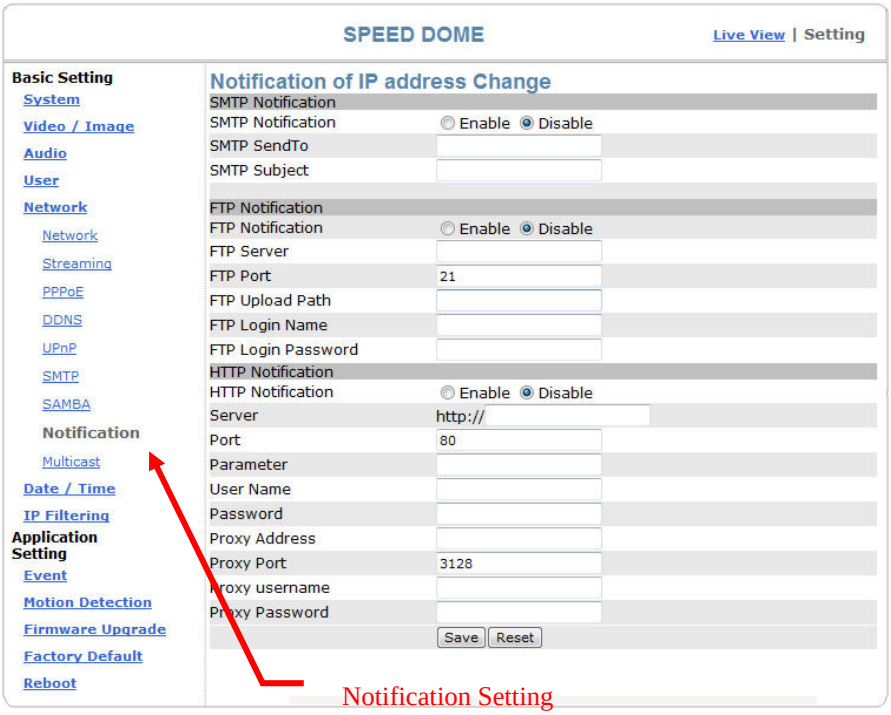
Server: the address of the server, i.e. http://.

Port: the port to access HTTP. The default setting is 80 (recommended).

Parameter: the setting of the parameters, refer to the installation setting of your HTTP server.

Refer to the installation setting of your HTTP server for the setting of the parameters (such as Username, Password, and Proxy).

Select Save to complete and activate your settings.



Basic Setting >\ Network >\ Multicast

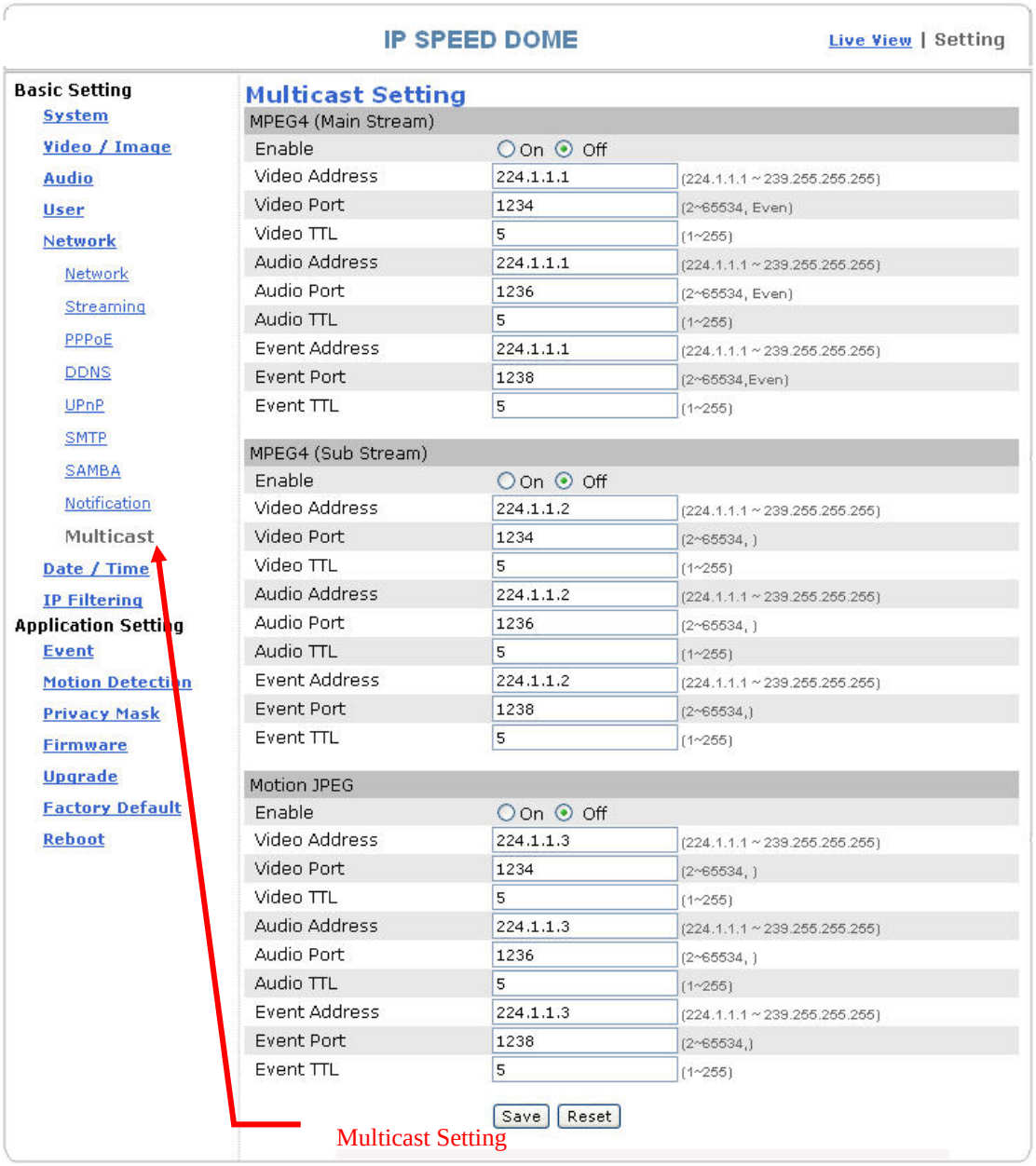
This function allows multiple people to watch video streaming without limitation on the number of users, but is only applicable in the LAN environment. The video streaming format (MPEG4/MJPEG) depends on the selected image format setting in Basic Setting → Video/Image → Video Format.

Basic Setting >Network >Multicast>MPEG4

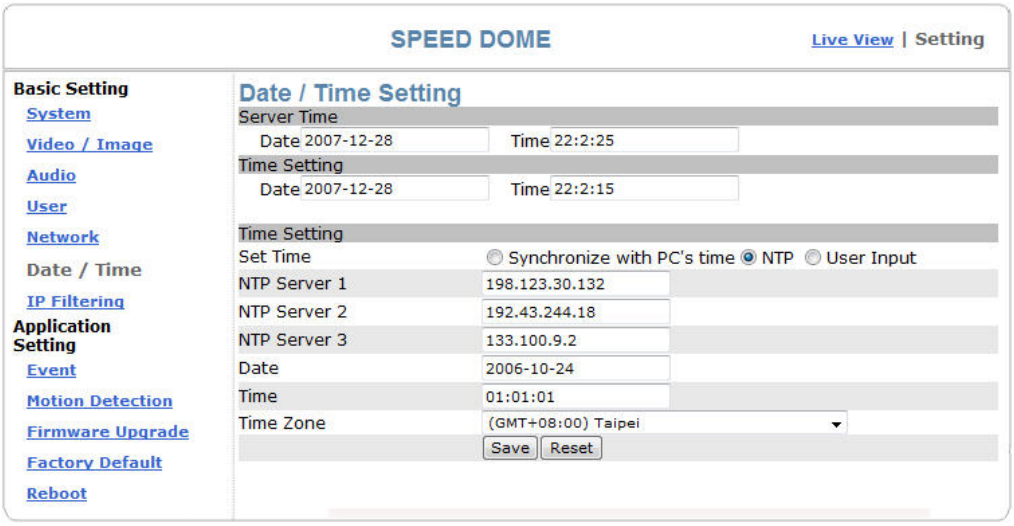
This function allows multiple users to view the MPEG4 video stream free from restrictions on the number of users. However, this is only effective within the LAN.

Basic Setting >Network >Multicast>M-JPEG

This function allows multiple users to view the M-JPEG video stream free from restrictions on the number of users. However, this is only effective within the LAN.


IP SPEED DOME
Live View | Setting
Basic Setting
System
Video / Image
Audio
User
Network
Network
Streaming
PPPoE
DDNS
UPnP
SMTP
SAMBA
Notification
Multicast
Date / Time
IP Filtering
Application Setting
Event
Motion Detection
Privacy Mask
Firmware
Upgrade
Factory Default
Reboot
Multicast Setting
MPEG4 (Main Stream)
Enable On Off
Video Address 224.1.1.1 (224.1.1.1 ~ 239.255.255.255)
Video Port 1234 (2~65534, Even)
Video TTL 5 (1~255)
Audio Address 224.1.1.1 (224.1.1.1 ~ 239.255.255.255)
Audio Port 1236 (2~65534, Even)
Audio TTL 5 (1~255)
Event Address 224.1.1.1 (224.1.1.1 ~ 239.255.255.255)
Event Port 1238 (2~65534,Even)
Event TTL 5 (1~255)
MPEG4 (Sub Stream)
Enable On Off
Video Address 224.1.1.2 (224.1.1.1 ~ 239.255.255.255)
Video Port 1234 (2~65534,)
Video TTL 5 (1~255)
Audio Address 224.1.1.2 (224.1.1.1 ~ 239.255.255.255)
Audio Port 1236 (2~65534,)
Audio TTL 5 (1~255)
Event Address 224.1.1.2 (224.1.1.1 ~ 239.255.255.255)
Event Port 1238 (2~65534,)
Event TTL 5 (1~255)
Motion JPEG
Enable On Off
Video Address 224.1.1.3 (224.1.1.1 ~ 239.255.255.255)
Video Port 1234 (2~65534,)
Video TTL 5 (1~255)
Audio Address 224.1.1.3 (224.1.1.1 ~ 239.255.255.255)
Audio Port 1236 (2~65534,)
Audio TTL 5 (1~255)
Event Address 224.1.1.3 (224.1.1.1 ~ 239.255.255.255)
Event Port 1238 (2~65534,)
Event TTL 5 (1~255)
Save
Reset

Basic Setting > Date/Time (date/time setting)



Date/Time setting

- **Basic Setting > Date/Time > Server Time (the date/time of the server)**
- **Basic Setting > Date/Time > PC Time (the date/time of your PC)**
- **Basic Setting > Date/Time > Time Setting (date/time setting)**

There are three ways to synchronize the time.

1. **Synchronize the time with PC's time:**

   The preset method of time synchronization of the camera time with your PC time.

2. **Get Time from an NTP server: synchronize the time with the NTP (Network Time Protocol)**

   - Click on the "NTP" Button
   - Enter the NTP server's IP address.
   - Press "SAVE" to activate it.

   The camera will update its time once obtaining the NTP time.

   Note: The default NTP servers are:

   A. NTP Server 1: 198.123.30.132

   B. NTP Server 2: 192.43.244.18

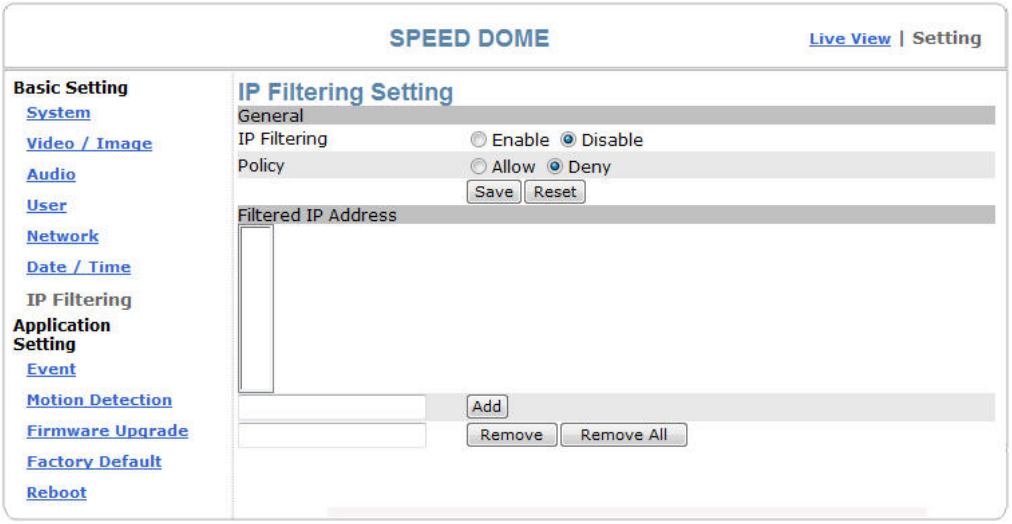
   C. NTP Server 3: 133.100.9.2

3. **Change the time manually:**

   - Click the "User Input".
   - Select the format of date display, i.e. "yyyy/mm/dd" format.
   - Select the format of date display, "hh:mm:ss" by 24 hours format.
   - Select the time zone.
   - Select "Adjust" to adjust time.

Basic Setting > IP Filter

This function filters IP addresses and is able to allow or deny visits from particular addresses/target addresses



IP filter setting

Basic Setting > IP Filter > General

IP Filtering: enables/disables the IP filter

Policy: allows/denies access

Basic Setting > IP Filter > Filter IP Address (Overview of the set IPs)

Add: enter the IP address you want to allow or deny the access of in the front field.

Remove: removes a set IP addresses

Remove All: removes all the set IP address

Special Attention

Setting rules:

1. Actions that may cause a limited connection are to be denied.

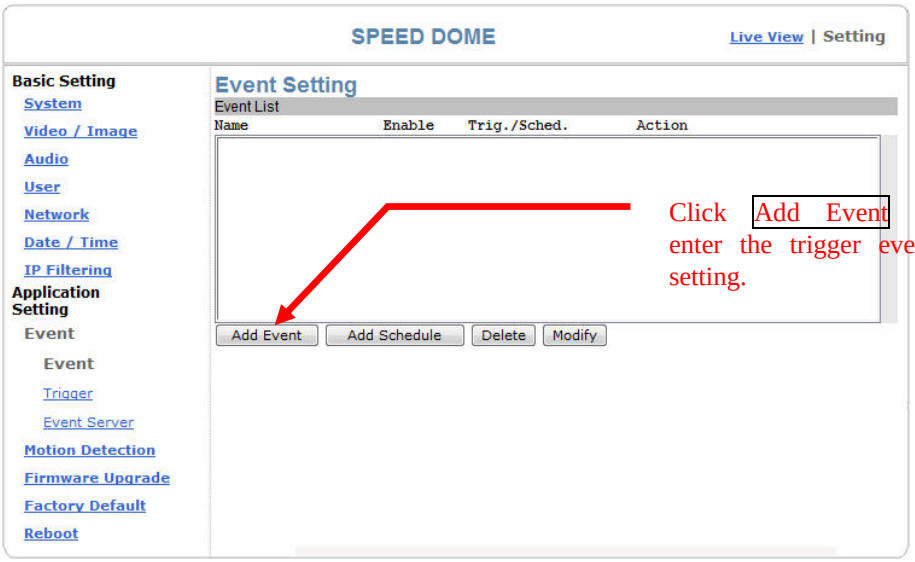
2. Improper use of this function may cause disconnection from Internet. You might need to use hardware reset to reset to the factory default. Please refer to the "Factory Default" for details.

Application Setting

Application Setting > Event (event trigger setting page)

This camera is equipped with intelligent security management functions. It ensures security monitoring by allowing user to define “trigger events” based on particular times and situations, and sets the camera respond to the event.

Application Setting > Event > Event List (trigger event setting)



Add Event : Add Event setting page

Options:

- General:

  Name: Name the trigger event here.

- Response to event trigger: the time setting of the trigger event

Always:	Always monitoring
During time:	Check the date you want to monitor (Sun~Sat) and the duration of monitoring here. For example, if you want to set the camera to monitor from 7 pm after work to 7 am next morning from Monday to Friday, check the boxes from Monday to Friday, enter “19:00” in the “Start From” field, and enter “12:00” in the “Duration” field.
Never:	Do not set the time.

- Trigger by: sources of trigger events **(Note: You can only set one trigger event once.)**

Alarm input:	The alarm is triggered by the security equipment connected from the DI terminals behind the machine, such as door/window detectors, infrared sensors.
Motion Detection:	The alarm is triggered when motion is detected. The camera will send an alarm when any objects appear in the set detection area.
On boot:	The alarm is triggered by reboot. The camera will send an alarm when the system is rebooted due to power shortage, sabotage, or other reasons.

- Response process: trigger event response **(Note: Multiple selections are available)**

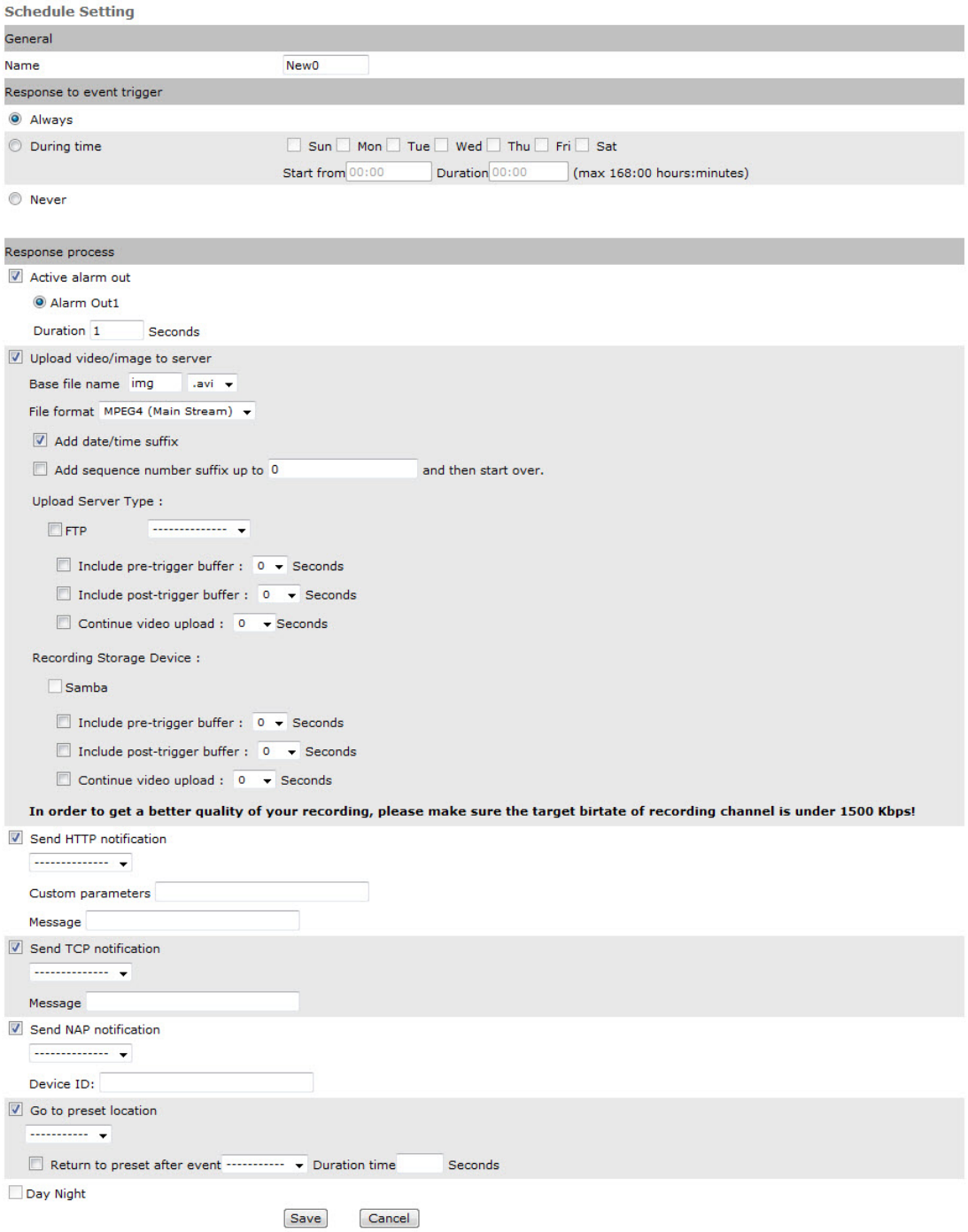
Active alarm out:	An event is detected by the security equipment connected from the DI terminal behind the machine, such as high-decibel alarms, light projectors. You can set the alarm duration in the “Duration” field.
Upload video to :	The camera will sent the capture Motion JPEG or MPEG4 video of the event to the FTP server or Samba you specified. Include pre-trigger buffer:When an event is detected,the camera will record the previous video image up to 10 seconds. Include post-trigger buffer:When an event is detected,the camera will record the post video image up to 10 seconds. Continue video upload: When the event is continue, the camera will record the viddeo image up to 10 seconds. For example: If the pre-trigger 5 seconds, post-trigger 5 seconds and continue video upload 5 seconds have been selected, the total file size will be 15 seconds.
Upload img to :	The camera will sent the capture photo of the event to the FTP server or Samba you specified.
Send HTTP notification:	The alarm will be sent to the HTTP server you specified. To use this function, set the coordinative HTTP server in the Event Server setting page in advance.
Send TCP notification:	The alarm will be sent to the TCP Server you specified. To use this function, set the coordinative TCP server in the Event Server setting page in advance.
Send NAP notification:	The alarm will be sent to the NAP Server you specified. To use this function, set the coordinative NAP server in the Event Server setting

page in advance.

Go to Preset Location	Force the camera turn to the preset location when the trigger is detected.
Day Night	Force the camera turn into Day/Night Mode when the trigger is detected.

Click Save to save and activate your settings when you completed setting.

Add Schedule: Add Schedule setting page

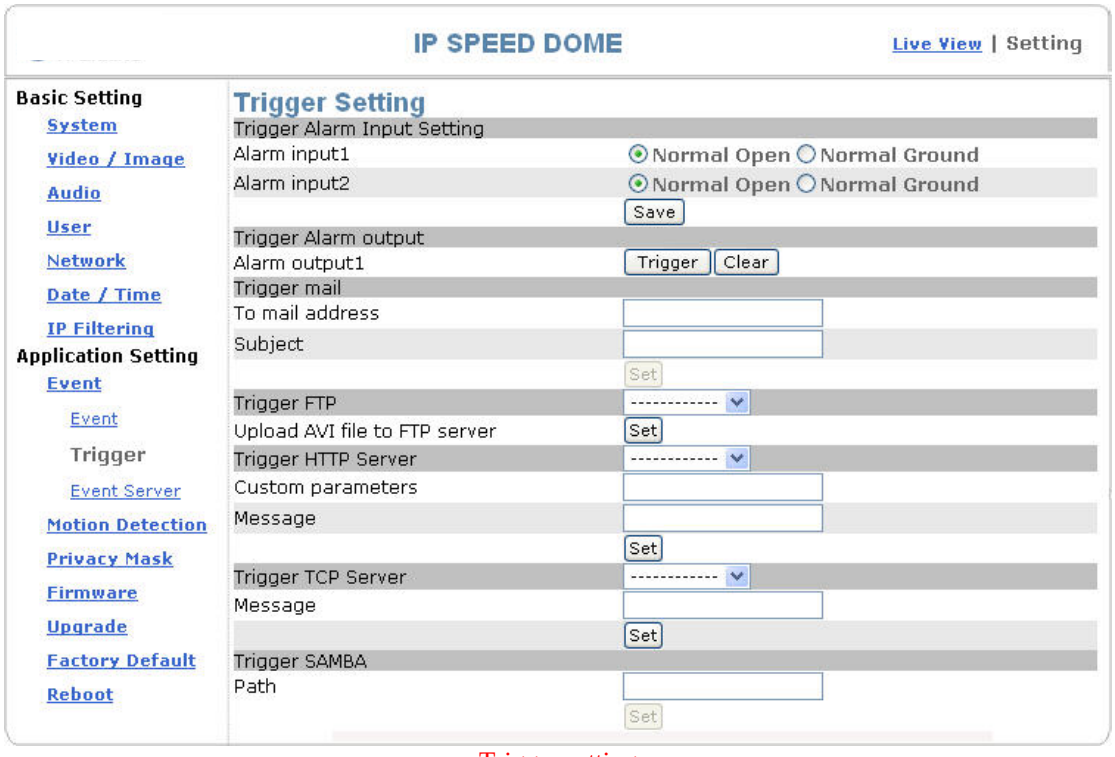

Schedule Setting
General
Name
New0
Response to event trigger
Always
During time
Sun Mon Tue Wed Thu Fri Sat
Start from 00:00 Duration 00:00 (max 168:00 hours:minutes)
Never
Response process
Active alarm out
Alarm Out1
Duration 1 Seconds
Upload video/image to server
Base file name img .avi
File format MPEG4 (Main Stream)
Add date/time suffix
Add sequence number suffix up to 0 and then start over.
Upload Server Type :
FTP
Include pre-trigger buffer : 0 Seconds
Include post-trigger buffer : 0 Seconds
Continue video upload : 0 Seconds
Recording Storage Device :
Samba
Include pre-trigger buffer : 0 Seconds
Include post-trigger buffer : 0 Seconds
Continue video upload : 0 Seconds
In order to get a better quality of your recording, please make sure the target birtate of recording channel is under 1500 Kbps!
Send HTTP notification
Custom parameters
Message
Send TCP notification
Message
Send NAP notification
Device ID:
Go to preset location
Return to preset after event Duration time Seconds
Day Night
Save
Cancel

The Add Event setting page and the Add Schedule setting page are basically the same except that the Add Schedule setting page does not have the option “Trigger by” to indicate the sources of the trigger event.
Click Save to save and activate your settings when you complete setting.

Delete: delete the event cluster setting.
Modify: modify the event cluster setting.

Application Setting > Event > Trigger (manual test of trigger response)

Whenever the camera detects abnormal events during the scheduled time, it will automatically respond by performing trigger response. There are 3 types of trigger responses: alarm sending, LED status indicator flash, and emailing the alarm or recorded image to the specified server. To use this function, enter the server information by accessing Application Setting > Event > Event Server. You may perform manual test as specified in this section once you complete the setting to ensure that all functions are working properly.



Trigger setting

The default status of the digital input pin is set as “Normal Open”, but users can change it to “Normal grounded” by setting the page “Setting->Application->Event->Trigger”:

1. When alarm input is set to be “Normal Open”, then the external device connected to alarm input pin should be in open status. So when the external device is triggered to close status, the alarm input pin will be triggered.
2. On the contrary, when alarm input pin is set to be “Normal Grounded”(see the figure below), then the external device connected to alarm input pin should be in

close status. So when the external device is triggered to open status, the alarm input pin will be triggered.
(Please refer to Attachment A for detailed explanation.)

Note: It is recommended to set up the Trigger Setting page (Setting-> Application Setting-> Event-> Trigger) before install the hardware alarm I/O.!

Trigger Alarm output: Alarm output
Click “Set” to trigger the alarm. Click “Clear” to stop the alarm. (Please make sure to click “Clear” for close the alarm testing when the trigger testing is done).

Trigger mail: Sending mail
Click “Set” after you enter the email address and subject to test the integrity of the sent mail.

Trigger FTP: Sending AVI file to FTP Server
Upload AVI files to FTP server to test the file integrity.

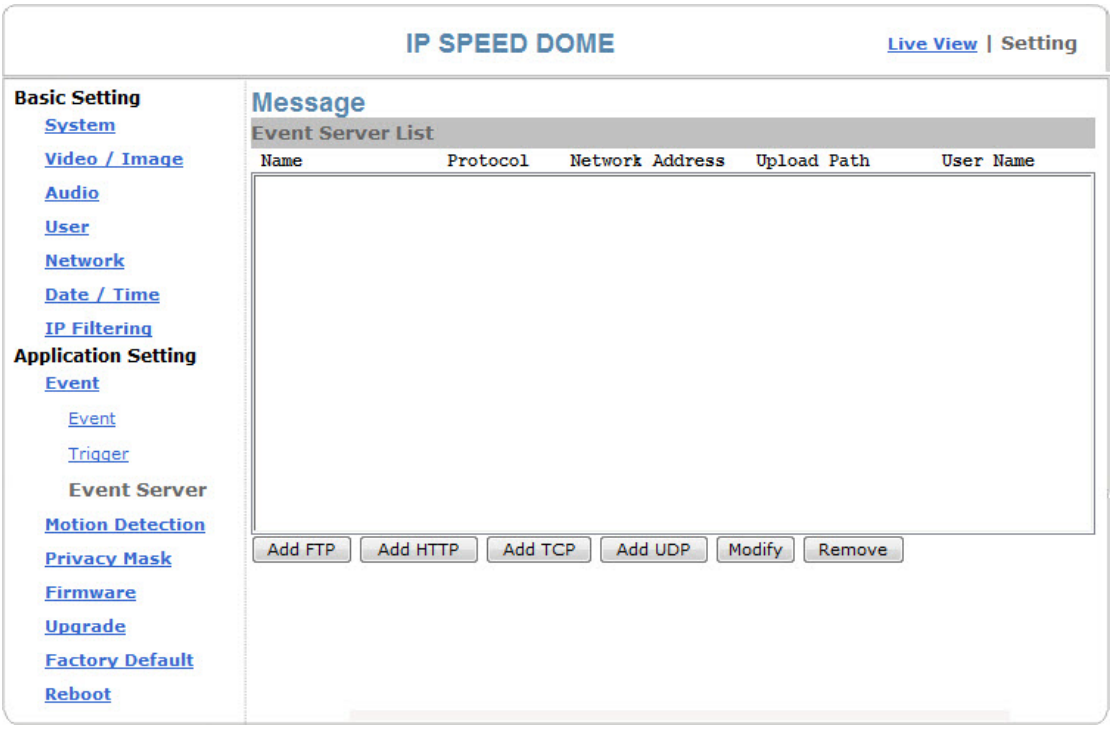
Trigger HTTP Server: Sending message to HTTP Server
Upload message to HTTP server to test the message integrity. Enter the message in the “Message” field. You may go to Application Setting > Event > Event Server to make a complete custom parameters settings.

Trigger TCP Server: Sending message to TCP Server
Enter the message in the “Message” field.

Trigger SAMBA: Sending message to Samba shared folder
Path: Enter the path of the shared folder in your PC.

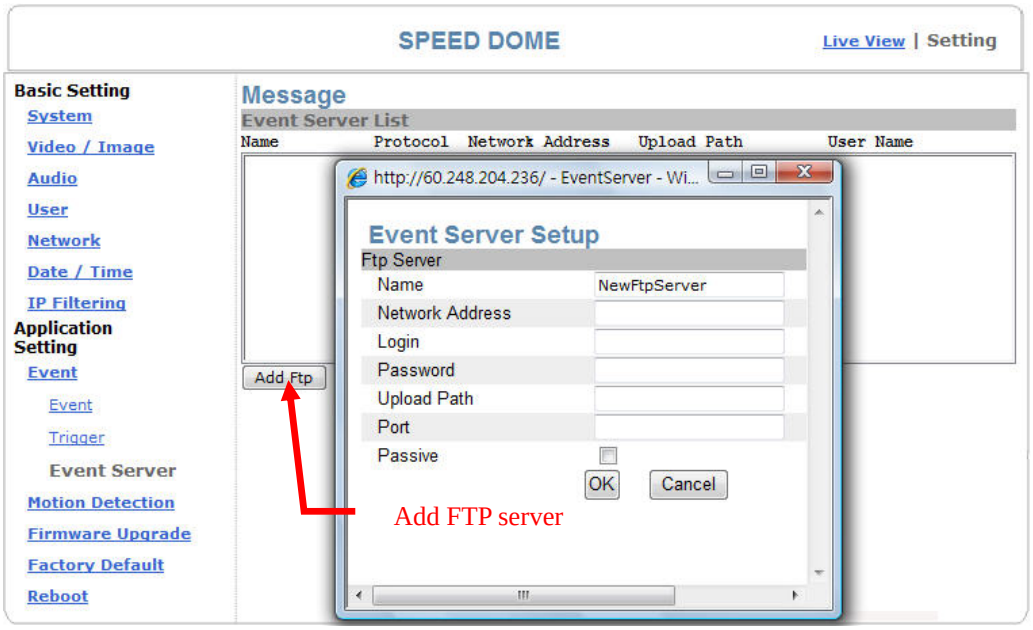
Application Setting > Event > Event Servers (setting for uploading trigger event file to the server)

Here you can perform a complete setting for uploading files to the server. Please set servers (SMTP, FTP, SAMBA…etc) in the Event Server setting by the instructions below:



Event server

Click Add Ftp to go to the setting page and enter the information of the FTP server you specified.



Name: the name of the FTP

Network Address: IP address of the FTP

Login: Log-in name

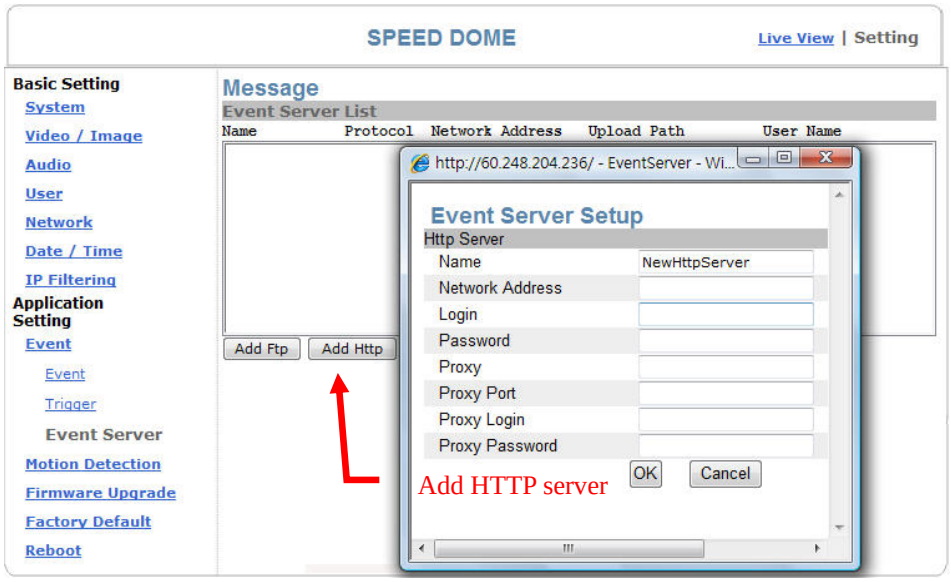
Password: Log-in password

Upload Path: Uploading path

Port: Port

Passive: Check to set the FTP status as passive

Click Add HTTP to go to the setting page and enter the information of the HTTP server you specified.



Name: HTTP name

Network Address: HTTP IP address

Login: Log-in name

Password: Log-in password

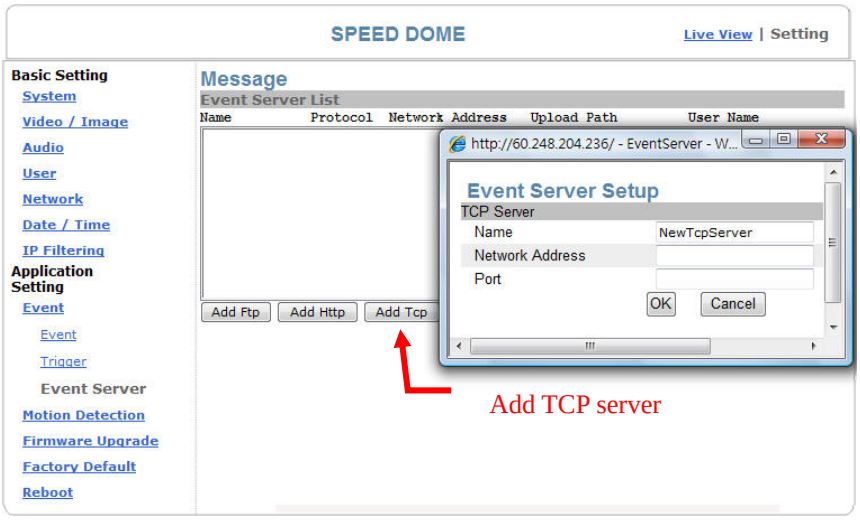
Proxy: Proxy server name

Proxy Port: Proxy server port

Proxy Login: Proxy server log-in name

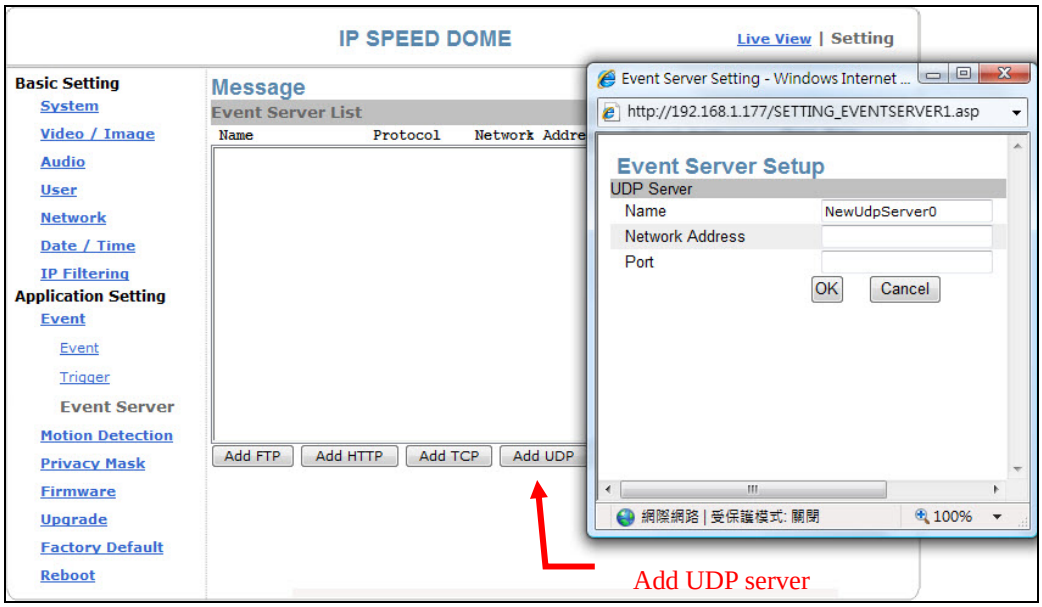
Proxy Password: Proxy server log-in password

Click Add TCP to go to the setting page and enter the information of the TCP server you specified.

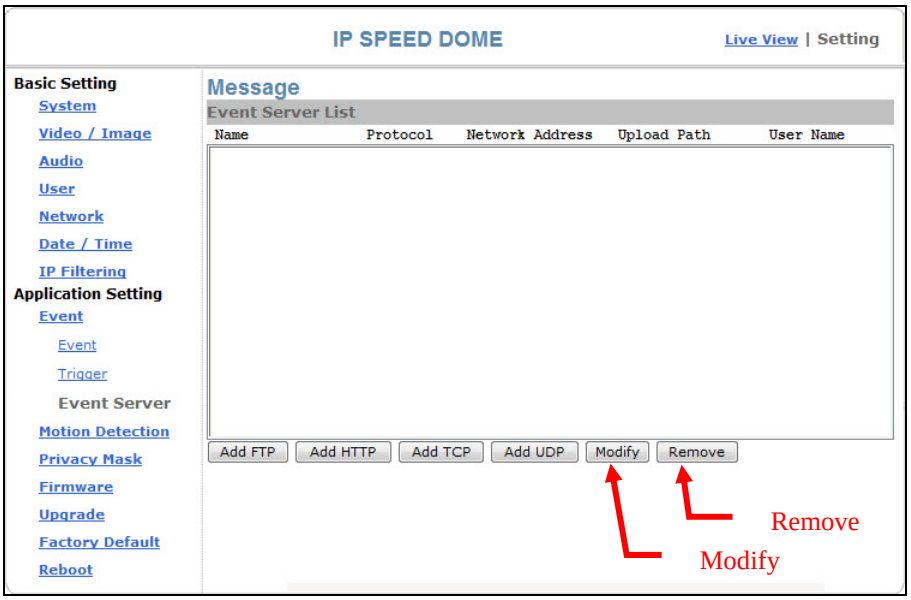


Name: TCP server name
Network Address: TCP IP address
Port: TCP port

Click Add UDP to go to the setting page and enter the information of the UDP server you specified.



Name: UDP server name
Network Address: UDP IP address
Port: UDP port



Modify: Modifies the setting value

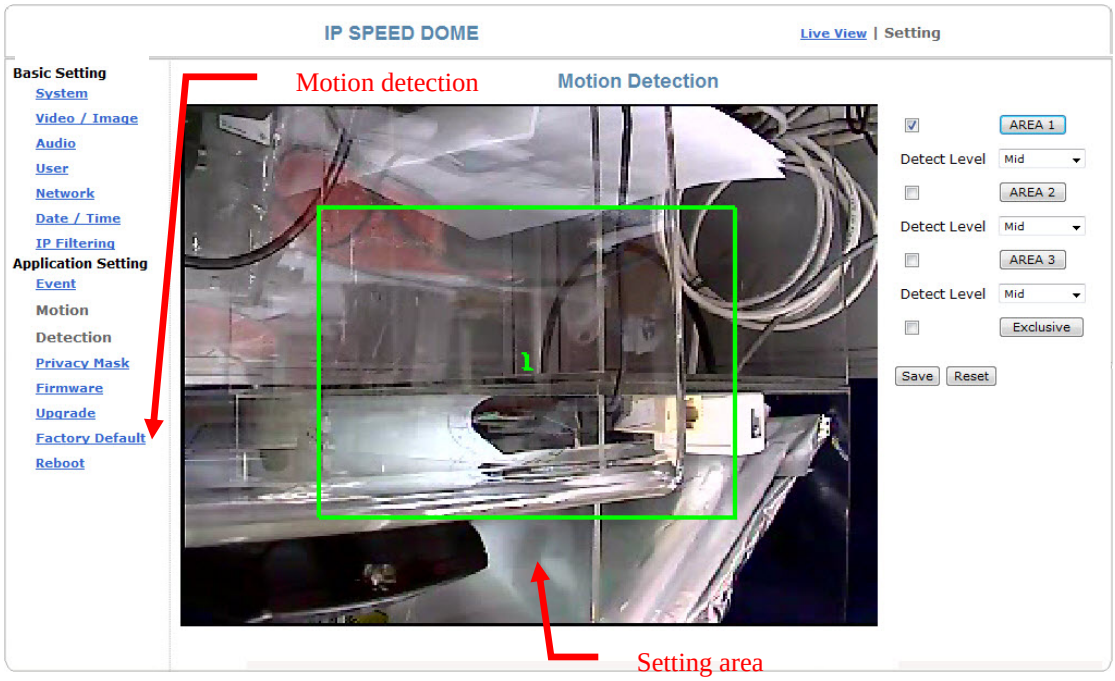
Remove: Removes the setting value

Application Setting > Motion Detection

You can open the setting frame by clicking on the area to monitor. To move area to monitor, drag the area with your mouse; to adjust the size of the frame, drag the arrow to adjust after you move the mouse to the edge of the area and left-click; There are 3 frames available for setting. You may adjust the sensitivity of the area by entering the degree of sensitivity in the “Sensitive” field. “1” is least sensitive, ”100” is extremely sensitive.

Select Save to complete and activate your settings.

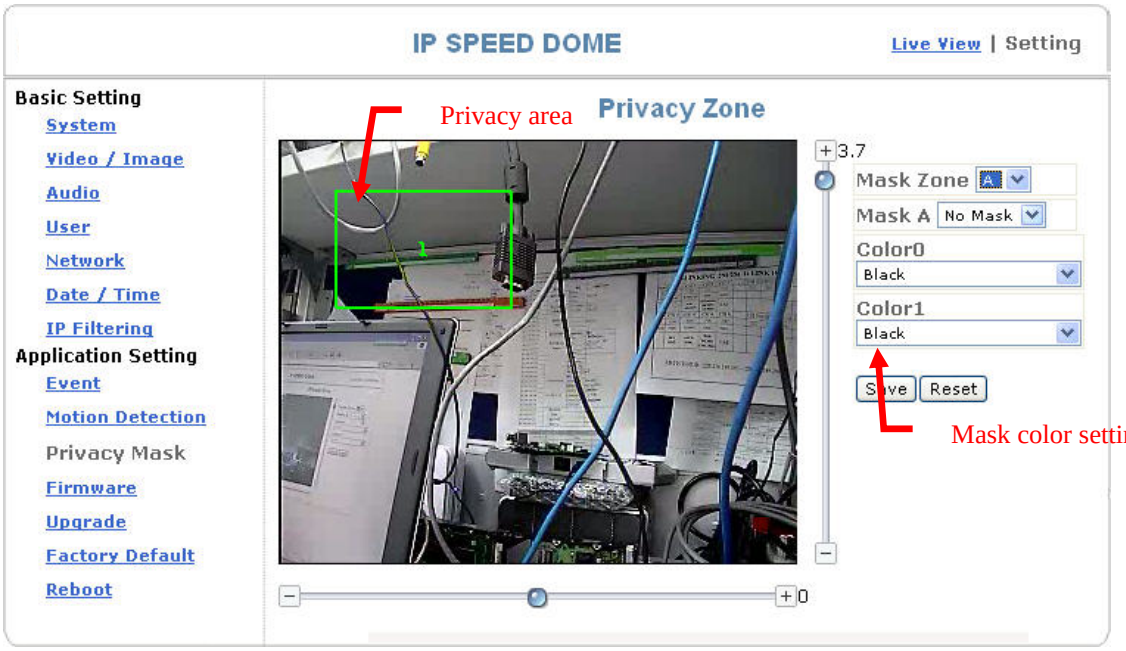
.

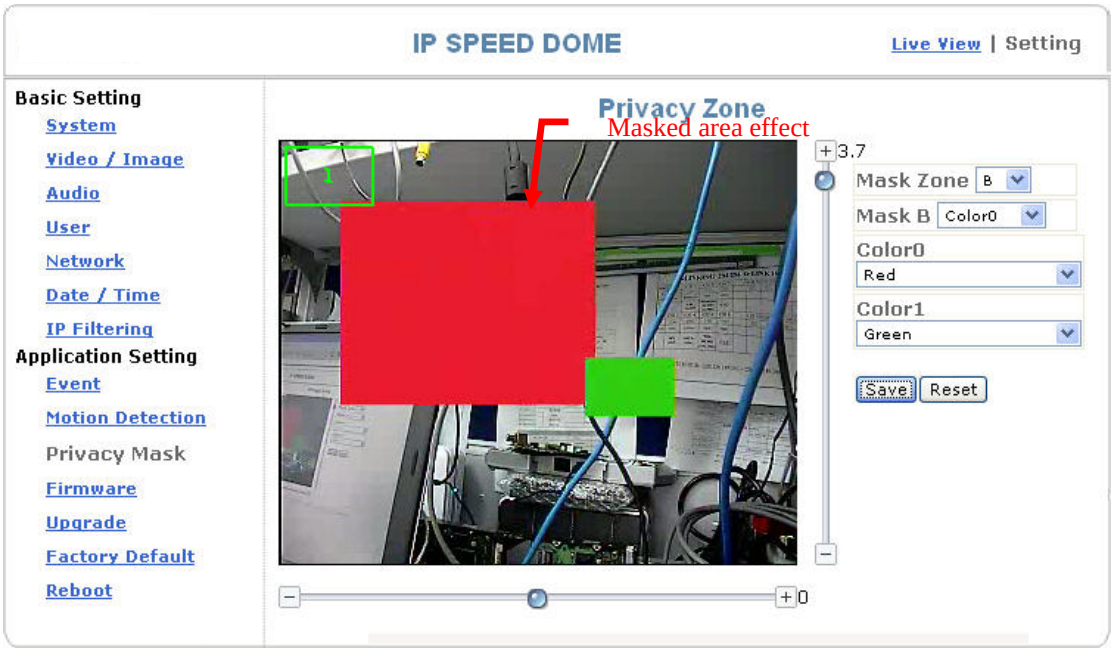


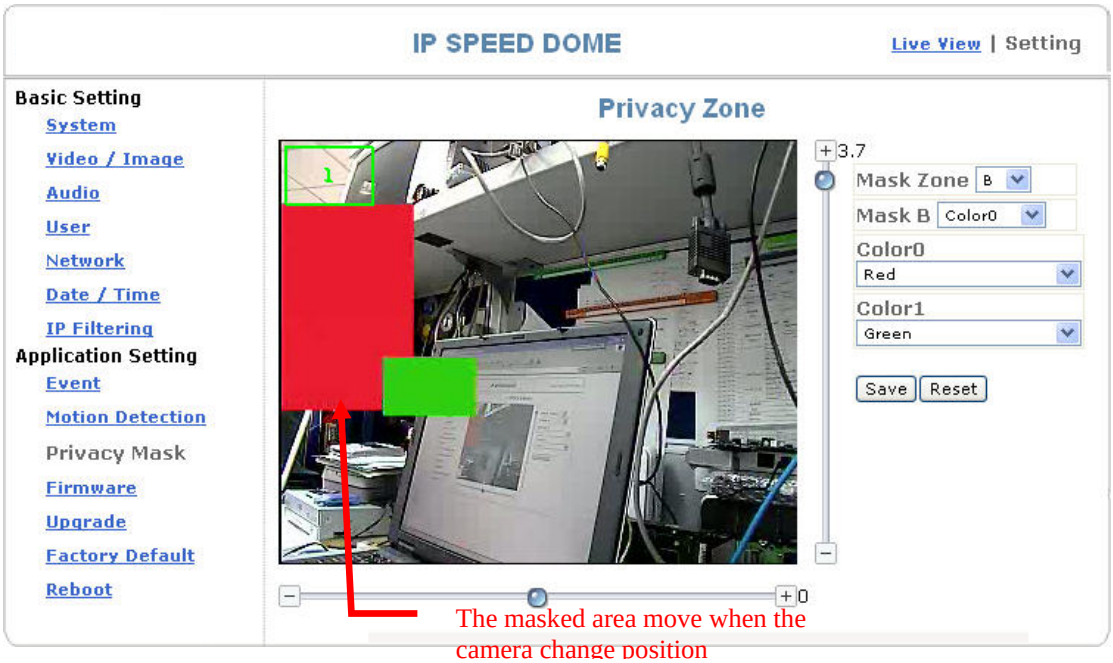
Application Setting > Privacy mask

The privacy zone function can mask the image in the mask zone to ensure confidentiality. First, select a mask zone (A to X) and a mask color (Color 0 or Color 1) in the privacy zone. Then, move the green frame to the area you want to mask. Moving the cursor to the bottom right corner of the frame can change the size of the frame. When the setting is completed, click Save to make the setting effective, and the screen will automatically refresh within a few seconds after the setting is effective.

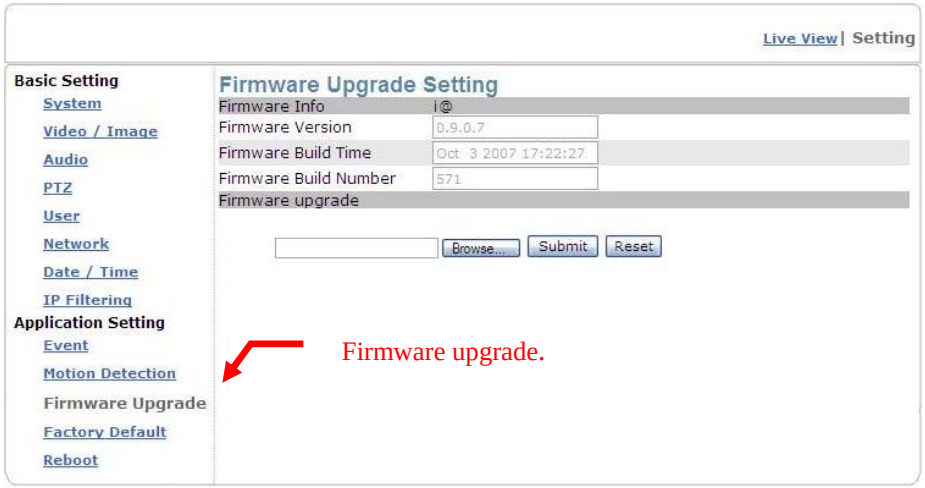
Note: No more than 8 privacy zones can be displayed on the screen. If more than 8 zones are set, they are displayed according to the priority (A is the highest, and X is the lowest). When the setting is completed, the computer reads the new setting and it takes about one minute to return to the live image screen. Please be patient.


IP SPEED DOME
Live View | Setting
Basic Setting
System
Video / Image
Audio
User
Network
Date / Time
IP Filtering
Application Setting
Event
Motion Detection
Privacy Mask
Firmware
Upgrade
Factory Default
Reboot
Privacy area
Privacy Zone
3.7
Mask Zone A
Mask A No Mask
Color0
Black
Color1
Black
Save
Reset
Mask color setting
0


IP SPEED DOME
Live View | Setting
Basic Setting
System
Video / Image
Audio
User
Network
Date / Time
IP Filtering
Application Setting
Event
Motion Detection
Privacy Mask
Firmware
Upgrade
Factory Default
Reboot
Privacy Zone
Masked area effect
3.7
Mask Zone B
Mask B Color0
Color0
Red
Color1
Green
Save
Reset
0



Application Setting > Firmware upgrade

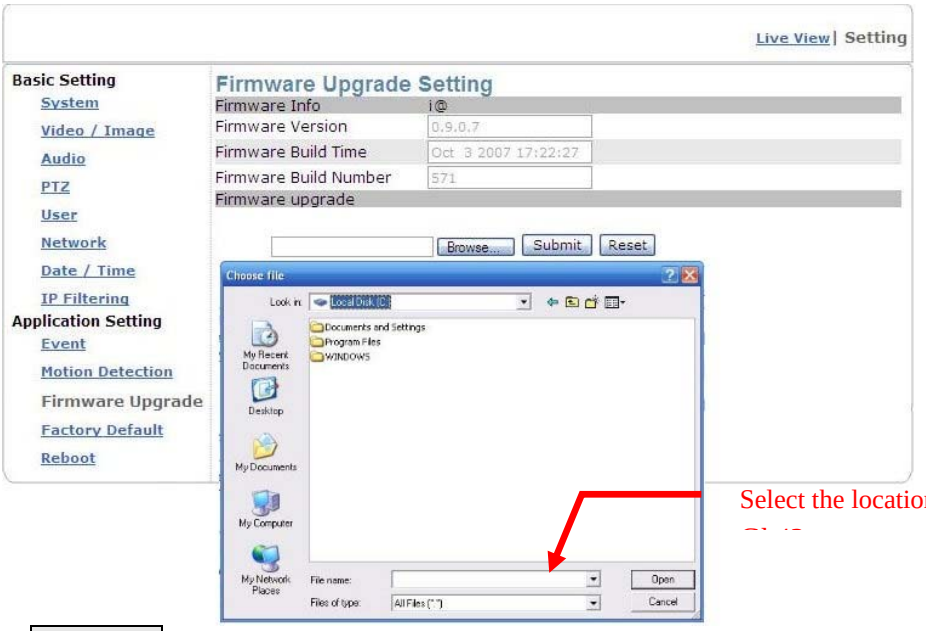


Contact your dealer for more information about firmware upgrade. The sales representative will transmit the latest version to you via e-mail. When you receive the firmware, decompress the file (**uImage.gz)** to your PC and follow the steps below to execute the upgrade.

Important! Read Carefully!!

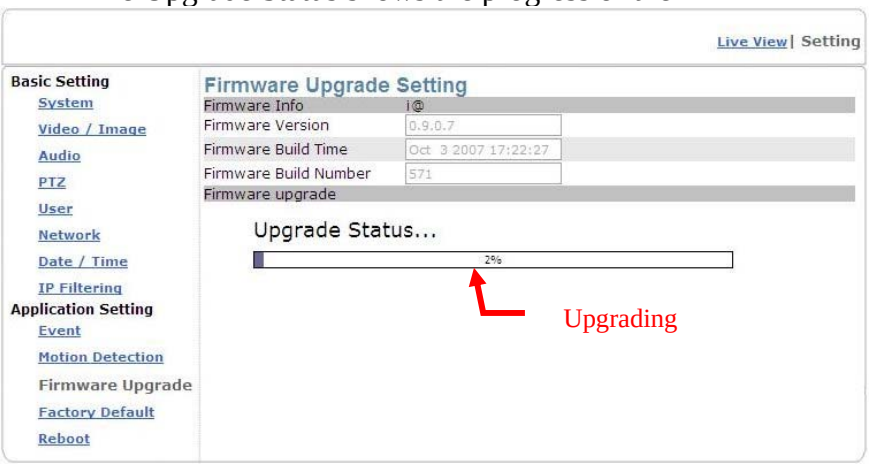
1. **Close all active applications on your PC.**
2. **Select "Firmware Upgrade"**

The Firmware Upgrade Setting page appears.

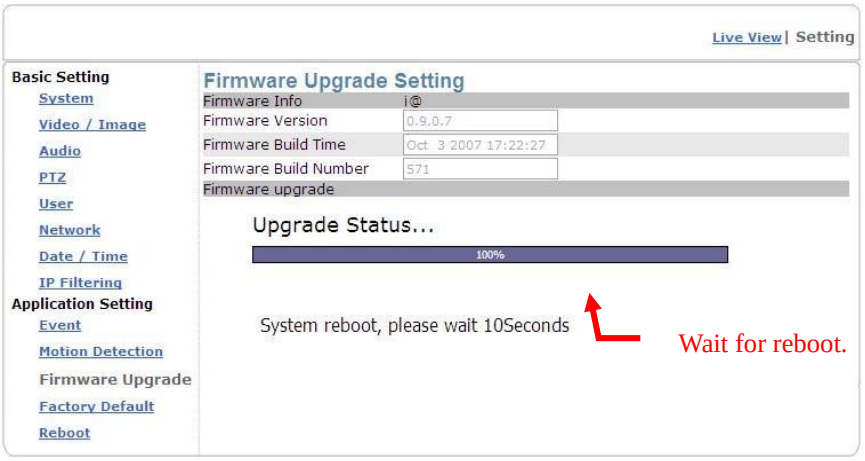


3. Click Browse… to select the location where the firmware file is stored.
4. Click submit.
5. The auto upgrade runs.

The Upgrade Status shows the progress of the upgrade.



When the firmware upgrade has been completed, the machine reboots automatically. Reconnect to the server after 60 seconds.

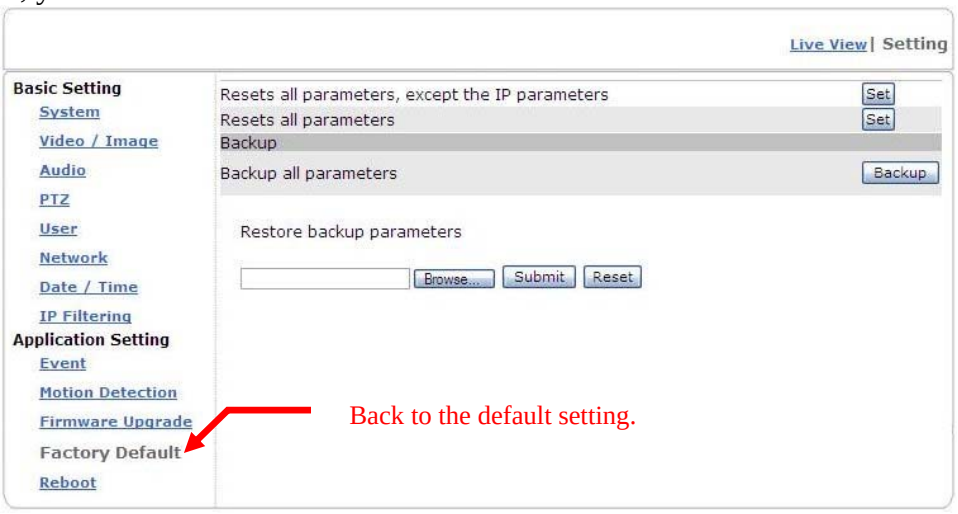


Note: The new firmware is burned into the Flash ROM during the upgrade, so you must take care during the process and make sure it is not interrupted during the operation. The system may be damaged seriously and need to be returned to the factory for repair if the power cable is removed or becomes loose during the upgrade. Firmware upgrading in a wireless network environment is not recommended because unstable packet transmission may bring about loss of data.

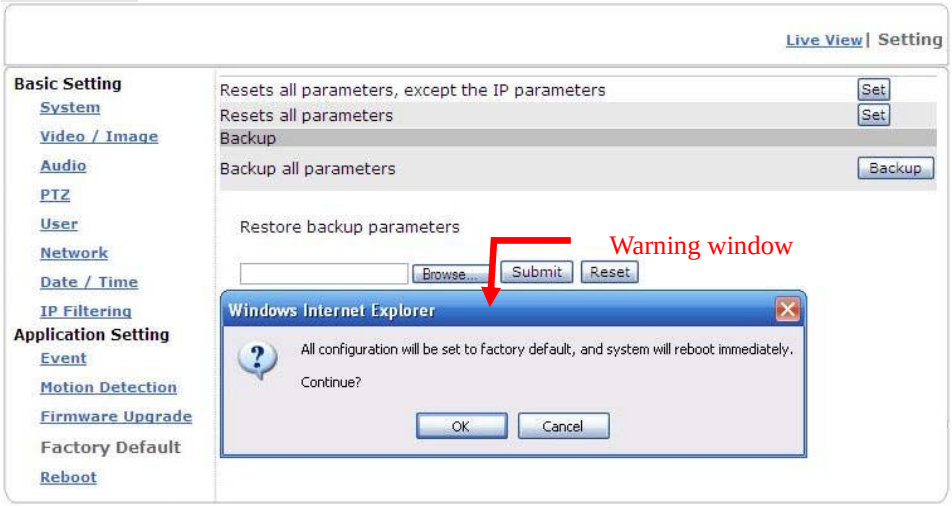
When the firmware upgrade has been completed, you don't need to restart the camera manually. The camera will reboot automatically after 60 seconds (Reboot OK). Then open the IE browser and key in the IP address (The original IP address remains undeleted).

Application Setting > Factory Default

You can use this function to reset to factory default, but all changes, including the IP address, you have made are deleted.



Factory Default: Reset to factory default .



Resets all parameters, except the IP parameters:

You can use this function to reset to factory default. All changes you have made are deleted but the IP address and all settings relevant to networking remain valid, including cable and wireless network settings. Click Set to complete the reset.

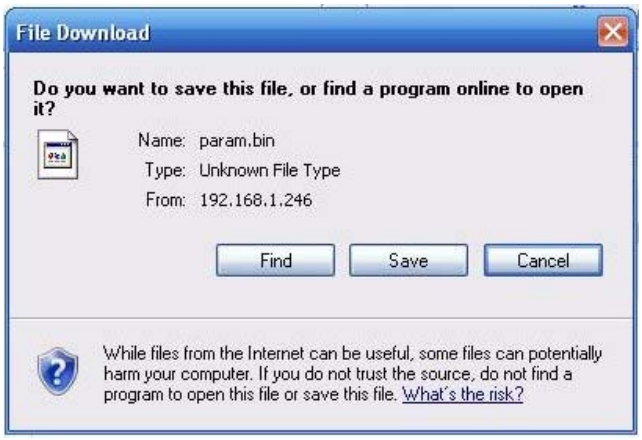
Resets all parameters:

You can use this function to reset to factory default. All changes, including the IP address, you have made are deleted. Click Set and a warning window appears to ask if you really want to reset to factory default. Click “OK” to complete the reset.

Backup: Data backup

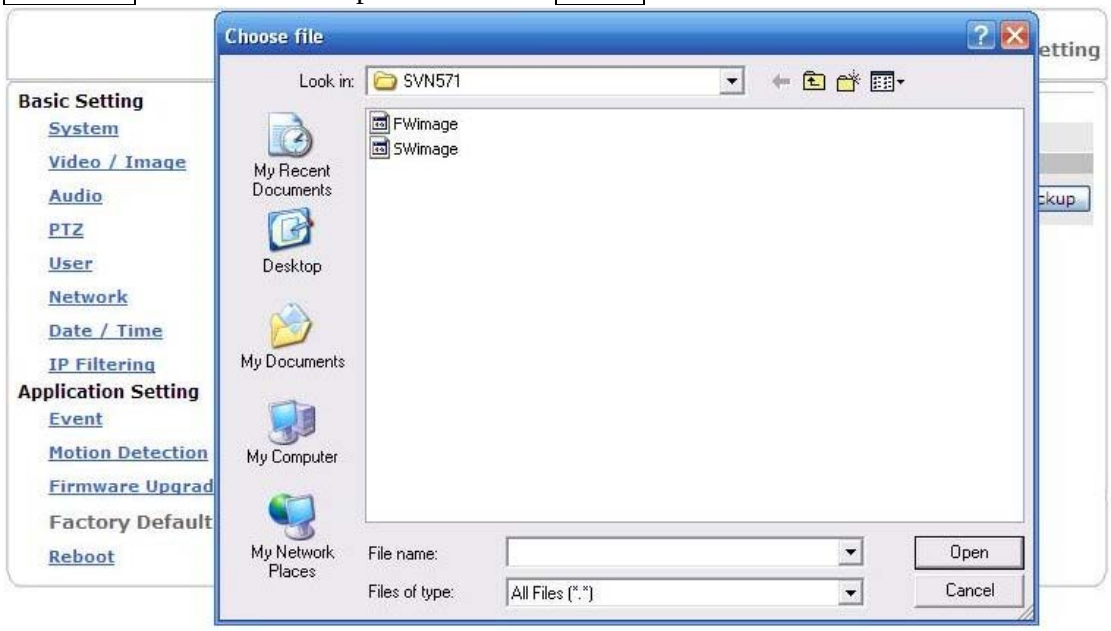
Back all parameters:

Back up all changes you have made. When you click Backup, a file download window appears. Back up the file named param.bin (**Don't change the file name; otherwise, the backup may fail.**)


File Download
Do you want to save this file, or find a program online to open it?
Name: param.bin
Type: Unknown File Type
From: 192.168.1.246
Find
Save
Cancel
While files from the Internet can be useful, some files can potentially harm your computer. If you do not trust the source, do not find a program to open this file or save this file. What's the risk?

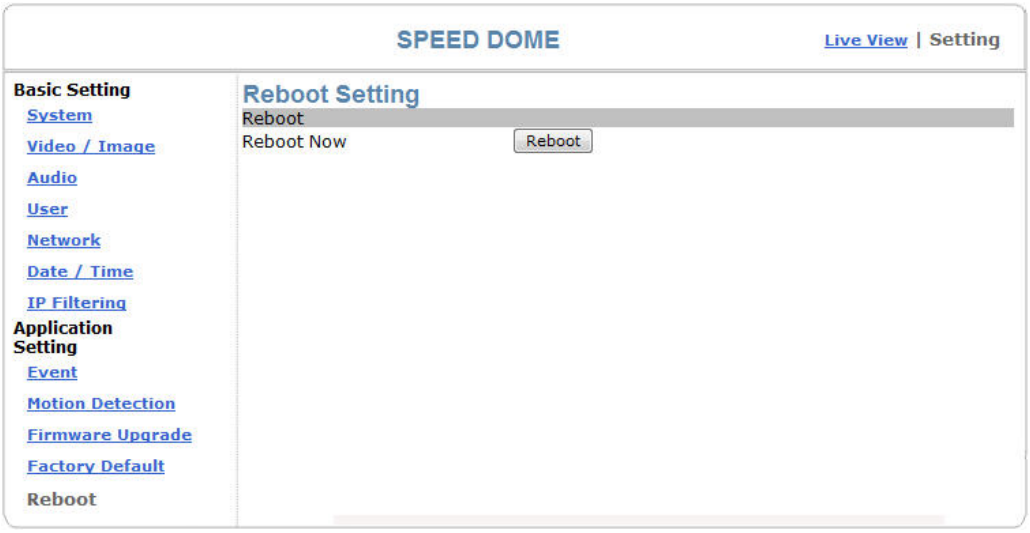
Restore backup parameters:

You can select this function to restore the changes you have made. To do this, click Browse… to select a backup file and click submit to confirm the restoration.



Application Setting > Reboot

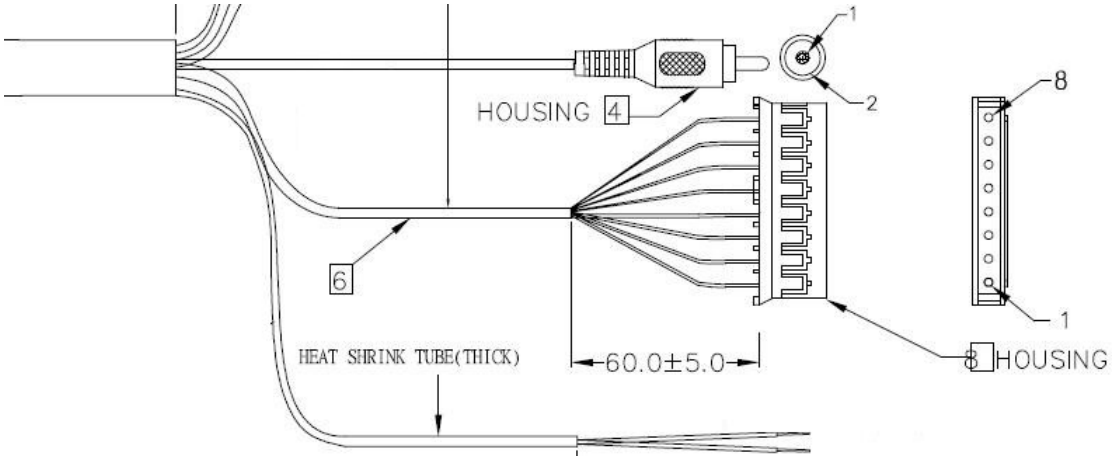
You can enable this function for the camera to reboot automatically。


SPEED DOME
Live View | Setting
Basic Setting
System
Video / Image
Audio
User
Network
Date / Time
IP Filtering
Application Setting
Event
Motion Detection
Firmware Upgrade
Factory Default
Reboot
Reboot Setting
Reboot
Reboot Now
Reboot

Attachment A: External Alarm

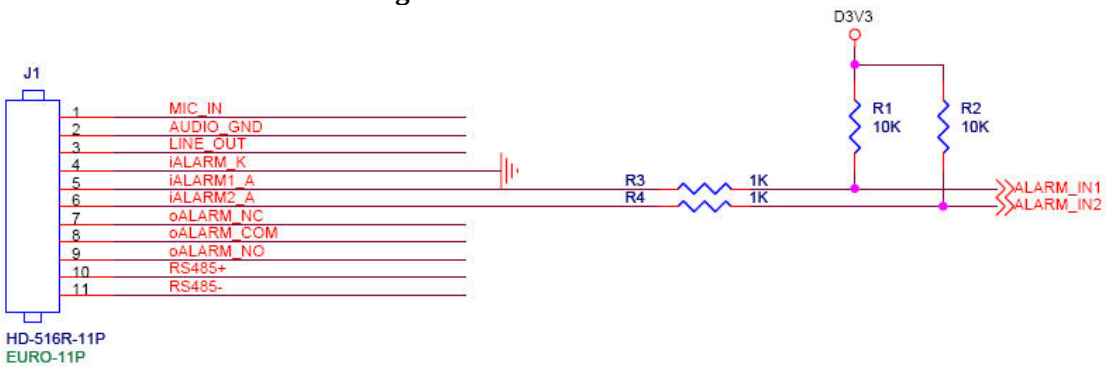
In addition to the motion detection executed by the internal software application, the product can connect to external infrared detectors, beepers, and smoke detectors. For more information about these external devices, contact to your local retailer, dealer or installation service provider. This product provides a standard Alarm I/O for you.

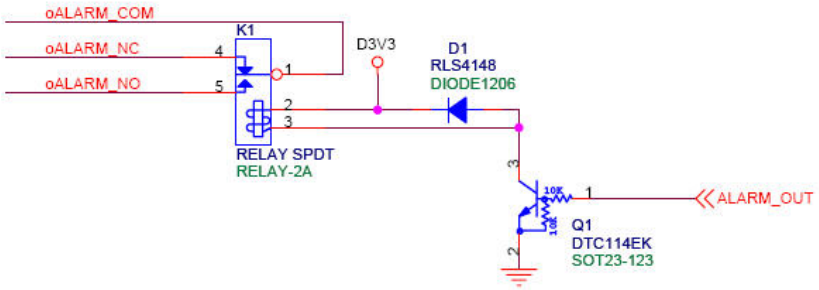
This camera provides 2 sets of digital inputs (DIs) and 1 sets of digital outputs (DOs). Pins 4 and 6 are designed for connection to external Sensor 1; Pins 2 and 4 for external Sensor 2. All 3 pins are designed for connection to the C connection equipment and should not access to voltage or current. Otherwise, the product will be damaged. Pins 5, 7 and8 are relays to normally open (NO) or close (NC) these external devices. These 4 pins only act as relay output contacts and no power is output (dry contacts).
The default status for this DI sets is NO. The gray color indicates the current status.
NC status can be selected by selecting Setting/ Application Setting/ Event/ Trigger/ Alarm Input Setting.
Applications:
1. When the status is NO, the connected C connection equipment should be NO as well. When the C connection equipment is triggered, the status will change to NC. The machine will detect this change and inform the system.
2. When the status is NC, the connected C connection equipment should be NC as well. When the C connection equipment is triggered, the status will change to NO. The machine will detect this change and inform the system.

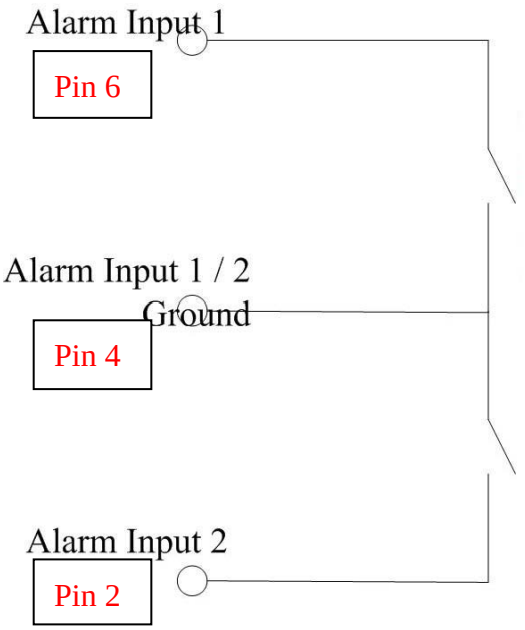


Pin	Color	Function
1	Brown	RS485-
2	Orange	Alarm Input #2 (A)
3	Yellow	RS485+
4	Green	Alarm Input #1/2 (K)
5	Blue	Alarm Output (NO)
6	Purple	Alarm Input #1 (A)
7	Gray	Alarm Output (COM)
8	White	Alarm Output (NC)

External Alarm I/O Circuit Diagram







Warning! The alarm will be triggered when alarm pin 4 & 6 are formed as a short circuit. Please do not connect the electric voltage or current into alarm input pin because the electronic current

Warning! The alarm will be triggered when alarm pin 2 & 4 are formed as a short circuit. Please do not connect the electric voltage or current into alarm input pin because the electronic current

Warning!

• Where connecting of a low or high current loop to the external alarm input/output of the product is required, the wiring and connection shall be conducted by a qualified electrician. Incorrect wiring may bring about damage to the product fatal electric shock.

• Direct connection of the external alarm input/output terminal to high-current equipment is not allowed and a customized repeat circuit might be required (provided by the customer) for some cases to isolate the terminal and the high-current equipment. Where the voltage/current of an external device exceeds the loading capability (5V) of the Alarm I/O, the product would be damaged seriously.

Attachment B: Bandwidth Estimation

Since the FPS is dependent on the bandwidth of the camera, the relationship between the size of an image file and the bandwidth is always the major concern of the system construction engineer.

The table below shows the relation between the resolution and size of an MJPEG file in the NTSC system. Please note that the values in the table are for reference only, because the size of an image file is closely related to the complexity of the environment and the actual situation of the place being monitored.

Image Resolution	Average range of Data Sizes
176 x 144 (QCIF)	20 – 40k bit
352 x 288 (CIF)	40– 200k bit
704 x 576 (D1)	200 – 530k bit

Ex.: The transmission speed on the Internet is 2fps under 352 x 240, i.e. 40k*2=80k to 200*2=400k per second. It is suggested to apply for 512K "upload" bandwidth.

Note 1: What the camera needs at the client end is the “upload” bandwidth. However, most ISPs in Taiwan provide download bandwidth that is wider than the upload bandwidth. Therefore, symmetrical bandwidth is a good choice for users who need wider upload bandwidth. Ex. download/upload = 521K/512K

Note 2: 32 kbps to 64kbps is required for transmission of audio signals.

Attachment C: Troubleshooting and FAQs

Question	Answer and Solution
Function	
What encoder and decoder are used by the camera for sounds and images?	The camera uses MJPEG or MPEG4 compression technology to provide quality images. MJPEG is a standard image compression technology applicable to different browsers without the need to install additional software. MPEG4 is next-generation image compression standard and can provide high image quality at low bandwidth. The sound decoder uses PCM (Stereo, 16bit, 8kHz) compression technology.
How many users are allowed to view the camera simultaneously?	The maximum number of viewers depends on the bandwidth of the client accessing the camera. About 5~6Mbps are used to process data of the camera, so the maximum number of viewers changes in proportion to FPS and the resolution of the image. Obviously, the higher the number of viewers, the lower the performance at each client end.
Is it possible to catch the image from the camera in a real-time manner?	Yes, you can use the snapshot function from the main control page.
Camera Installation	
Can the camera be used outdoors?	The camera is not waterproof, so a special waterproof cover must be available for outdoor use. Please note that the waterproof cover may affect the built-in pickup function of the camera.
Link LED does not light up.	• Check that the attached standard transformer is not damaged. Plug the power cable and reboot the machine. • If the problem remains, contact your dealer for help.
What network cable is used for the camera?	The camera uses a 10 or 100 Base-T Category 5 UTP network cable.
How to install and operate the camera behind a firewall?	If you have a firewall in your network environment, please select HTTP mode (Port80). Generally the port 80 is always open for the browser to access the Internet.
What are the username and password for the first use and after reset to factory default?	Username = **root** Password=**root**. Please change your password immediately after entering the system to ensure information security.
I forgot the username and password I used for the setting. What should I do?	Please proceed as follows: **1.** Hold the Reset button for 4 seconds after booting to reset the password to preset. **2.** Change the username and the password.
I forgot the IP address of the camera. What should I do?	Use IP Finder to locate the IP address of the camera. Please connect the camera and the PC on which the IP finder is executed to the same hub.
IP Finder cannot find the camera.	• When the camera still can't be located over 1 minute, re-activate the camera. • Do not connect the camera to more than one router. The IP Finder will not be able to detect the camera. • If the IP of PC on which the IP Finder is executed is not correctly set, the IP Finder will not be able to locate the camera. Please confirm that the IP address has been properly set. • The anti-virus applications on the PC or the firewall might block the IP Finder from execution. If you can not execute the IP

	Finder, please disable your anti-virus applications or firewall.
Internet Explorer does not display the camera screen correctly.	Please be sure that the version of your Internet Explorer is 6.0 or later. Should you have any difficulties, please log on the Microsoft website to update your browser. Microsoft website: http://www.microsoft.com/windows/ie.
IP Finder cannot store network parameters.	• Do not use spaces. Use underline "_" or dash "-". • Your connection might have problems. Please ensure that the network parameters and the camera connection are correctly set.
Access to Camera	
I cannot enter the login screen and camera page from Internet Explorer. What should I do?	• The IP address of the camera is possibly being used by another PC or device. Please disconnect the network cable from the camera and execute PING to confirm if the IP address has been used. • It is possibly due to the network cable. Please use the cross-line network cable to connect the PC and the camera, and see if the log-in screen appears. • Be sure that the network connection and the settings are properly configured. • Be sure to enter correct IP address in the Internet Explorer. If you use dynamic IP address, the address might have been changed after your last check. • Internet traffic might slow down the webpage access. Please wait. • Be sure that you are using http port. The default setting is Port 80. It will be converted to the private camera IP address. • The port assigned for your camera might not able to access the Internet. Contact your ISP to acquire a usable port. • The proxy server might be blocking you from connecting to the camera. Do not set the proxy server. • Please be sure that the default gateway address is correct. • Your router might need Port conversion. Refer to the user manual of your router for details. • The package filtering function of the router might have blocked the access to the external Internet. Refer to the user manual of your router for details. • If you are using DDNS, please remember to set the default gateway and server address. • If none of the procedures above is working, please reset to the factory default values and re-install. • If the problem still persists, there might be some problems with the product. Contact the dealer who sold you the product for more help.
No image appears on the main control screen.	• When using PC to connect to the camera for the first time, a security warning window will tell you that you need to download the ActiveX control. When you are using Windows 2000 or Windows XP, you might need a properly- authorized user account to install the application • Network traffic might slow down the video streams. If the video is extremely slow, select a lower resolution for a lower bandwidth requirement.
Check whether the Active X control of the camera has been installed in your computer.	Select C:\Windows\Downloaded Program Files to check if the file "**Media Viewer Class" is registered**. The status bar should indicate the file has been installed. If you do not see this file, be sure that your Internet Explorer security is properly set (the default value is moderate). Re-connect to the camera main page and

	download the file again. Incomplete download or installation of the camera ActiveX control is the major reason for this problem. Check the security setting of your Internet Explorer. Close and re-open Internet Explorer, and enter the main page to see if you can log in.
Internet Explorer displays the following message: Downloading the ActiveX control is prohibited under the current security setting."	Change the IE security setting to allow downloading unsigned ActiveX control. IE→Tools→Internet Options→Security→Custom Level. Change "Inactive" to "Tips" for the ActiveX control if required.
The camera can operate only in the LAN rather in the Internet environment.	• A firewall mechanism might have been activated. Check the setting of your system or ask your network administrator. To access the camera from the Internet, you may need to change the setting of the firewall. • Make sure that your camera does not conflict with other servers on the same LAN. • Check the router and make sure that its setting allows it to access your camera from the Internet.
The number of frames transmitted are less than the defined value.	• Congestion of the network or objects of the image may affect the number of frames transmitted. The number of frames may be less than the defined value when they are transmitted via a congested network. • The number of frames transmitted may become less when multiple users are viewing the video stream. • The network hub might be another reason for this problem, especially when multiple camera video streams are viewed simultaneously.
When the audit function is activated, the video streaming area becomes black or the transmission becomes slower.	• When you connect your PC to the camera, no sufficient bandwidth is available to support more frames with the current resolution of video streams. Reduce the resolution to QCIF(176x144) or CIF (320x240) and deactivate the audio function. • The audio signal needs 32 to 64 kbps of your bandwidth. You can deactivate the audio function to improve the image quality. Your Internet service may have not sufficient bandwidth to support audio transmission.
Images cannot be transmitted via e-mail or FTP.	• Make sure the IP address of the gateway and domain server (DNS) have been defined correctly. • Where FTP still fails, contact your ISP or network administrator to check the FTP server.
I can't control the camera to move up, down, right, left or to the center or preset point.	• When communication to the camera stops, click **"Refresh"** on your IE browser to refresh the transmission. • It might be that other users are controlling the movement of the camera. • The horizontal/vertical movement of the camera has reached its limit. • The horizontal/vertical remote control option of the camera might have been deselected.

I can't control the camera to move up, down, right, or left smoothly.	Delay might occur when you are accessing a video stream and remotely moving the camera horizontally. Where significant delay is identified when you move the camera horizontally or vertically deactivate the audio streams and/or reduce the size of the video stream...
Camera Image Quality	
Camera has a problem focusing.	• The lens might be contaminated with dust, fingerprints, or other dirt. Use a special cleaning cloth to clean the lens or adjust the focus manually. • Focusing might be impossible in some cases. If the object is too close to the lens, more it away from your camera.
Color of the video stream is too deep or light.	• Please confirm that the image your are watching has the best quality. Adjust the setting of your display card (color quality) to at least 16 bits (24 bits or more are recommended). • Incorrect camera video setting. You may need to adjust some parameters, such as brightness, contrast, color, and saturation.
Video stream flashes.	• Incorrect power cord frequency may cause flashing of the image. Confirm that your camera uses NTSC or PAL system. • The image flashes if the objects are black. In this case, adjust the illumination brighter around your camera.
This is noise problem during transmission of the image.	Noise may be produced if you install your camera at a very dark place. Adjust the illumination around your camera.
Others	
How to reboot my camera?	If you only need to re-boot the system and don't want to change any setting, enter the Setting page and select the Reboot option at the bottom of the screen. The system will reboot automatically.
I can't replay recorded files.	Confirm that you have installed Microsoft®'s DirectX 9.0 or above and use Windows Media Player 9 or above.

FCC Class A Announcement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any change or modifications to the equipment not expressly approve by the party responsible for compliance could void your authority to operate such equipment.